

# Analytical Market Trading

A window  
into the future

A groundbreaking book, brand new methodology, and never before seen trading techniques for stocks & derivatives in today's dynamic market.

Frank Dileria



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First Published 2003 by Frank Dileria

2<sup>nd</sup> Edition Published 2006 by Frank Dileria

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## Comments...

*I have followed Market Profile, Peter Steidlmeyer, Drummond Geometry, Charles Drummond for some time now, and to some degree, Robert Krausz. But I have been most interested in Range of cycles and their movement over time. You are ahead of the curve. Your book has confirmed to me what I have been seeking. Keep up the great work. John (US)*

*I wanted to say that I've read and own quite a collection of books on trading and your's is probably the most groundbreaking or revolutionary book I've read. Bill (US)*

*Thanks for all the hard work you put into the book and systems. It has been mind bending to see it in action, Time as the variable, somewhat like Einstein's theory that time is all relative and thus a variable, not fixed throughout the universe. William (US)*

*Hi Frank, Happy New year and thanks for the book and all your efforts - a great piece of work. Paul (NZ)*

*What do I think thus far: well I would go as far as saying without any reservation it is the best trading book I have read since my foray into trading began in 1997. I would happily bin every book I own and keep just your book. After reading through once I sat there wishing I had discovered your book years ago... I love your approach to trading & it sits so well with my mental thought process. I have been using some of your concepts in my trading but did not realise why it made sense. Your book gels the entire framework together nicely that sits well in my brain. Honestly Frank I sincerely congratulate on a huge effort...you must be so proud!!! Nigel (Commercial Trader AUST).*

*The systems outlined in this book are fantastic, and also the methods are ideal for 24-hour markets, so as soon as tradestation produce Range Bars in their software I'll be using this book to provide ideas!*

**Andrew (Analyst and systems developer for a Global Trading house)**

*I can tell you from my 20 + years experience most of it is rubbish. Frank's book is certainly worth the price...believe me. It's not easy reading as Frank is a trader first and foremost and not an author...so like me you'll probably need to have a few cups of coffee when reading it...but persist...because he makes sense of what really does appear to be random.*

*I don't recommend many people's work unless I believe there is value...and you'll have it with Frank. Brent (Trading systems developer and Trading Book author)*





*Dear Reader,*

*Thank you for purchasing Analytical Market Trading 'a window into the future' by Frank Dileria.*

*I want to begin with saying that the information within this book does not exist anywhere else in any other publication that I know of. It is years of experience and developing an understanding of how today's market operate under the influence of Price and TIME that has allowed me to put pen to paper.*

*This book looks extensively at derivative and equity markets using techniques that are easily applied and more importantly provide profitable set-ups based on statistical repetitive patterns.*

*Analytical Market Trading contains trading strategies that you will not find anywhere else. It has been developed using statistical patterns and components of Time that any long-term investor or any intra-day derivatives trader can use. This book will also introduce you to my day trading strategies called the 'Single Day Cycles' based on standard deviation patterns. These set-ups will swing the odds in our favour each and every day.*

*Analytical Market Trading 'a window into the future' was first published in early 2003, updated in October 2004 and once again in April 2005. I have just released the brand new edition for 2006 with extra information and never before seen trading techniques not part of the earlier editions. The last chapter alone is worth the price of the book as it describes in detail our ability of creating financial wealth beyond our wildest dreams.*

*This book has come along way since first released in 2003 when it was delivered only in PDF format. I have also included a CD. This CD has all the illustrations in colour that are within the book. This will help clarify the descriptions and information that appears in the printed book that you have received. The 2<sup>nd</sup> file on the CD has two extended chapters of 5 and 7 that were part of the original book.*

*This book is for the serious professional trader looking for an edge using some of the most advanced trading techniques that allow 'a window into the future' using a simple mathematical equation that is easily applied, or for any person serious about expanding their knowledge of developing their own systems and ways of trading based on the knowledge that exists within the pages of this book.*

*AMT is all about the 'WHEN FACTOR', when the best time of entering, exiting, and investing in today's derivative and stock markets so we shift the odds into our favour and develop an understanding of Market Risk. AMT is all about trading today's dynamic markets, how we shift the odds in the trader's favour so we maximize the potential of any trade we undertake.*

*Traders need to have a better understanding of why TIME is the most important component of today's market, because Time is the only thing that we are able to forecast, once we are able to comprehend this then each trader will begin observing the statistical phenomena of the same patterns occurring over and over again. This book will help any trader develop a sense of pre-empting the probable moves before they occur using simple techniques that are easily applied.*

*If you need any questions answered please feel free to email me on...*

*Frankd@fdtrade.name.*

*Regards,*

*Frank Dilernia.*

*This book is dedicated to the many pioneers of the industry that have lead the way in developing new methodologies that have helped traders try and achieve what each individual desires. One of those pioneers is the late Robert Krausz.*

*The book now is the revised edition for 2006 with never before seen trading techniques and extra information that wasn't part of the earlier versions.*

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## **Preface.**

### **My Story.**

My name is Frank Dileria and I'm a private trader, I run a commentary and coaching group for professional traders that are serious in maximising their true potential trading derivative and equities markets.

**AM-Trade Group** also provide coaching for any trader and any level of experience so that they can learn why the markets behave the way they do.

**AM-Trade Group** began in February 2003 and was started because a few traders wanted an email service and alerts whilst trading the Australian Index futures market (SPI). This small group of members has steadily grown from a few traders into many all with the same purpose; too make money!

Other traders noticed me when I provided the analysis for the bottom in the stock market in 2002 and subsequent rally. Over the following months of continually making 'trading calls' with high accuracy in stock market bulletin-boards, a few traders asked whether I could provide and coaching service and an analysis on our market and stocks.

When I started this service in February 2003, the 'new members' of AMTRADE Group benefited from my call of the exact bottom in our market, the day of reversal in March 2003 and the subsequent 3-month rally from 2680 to 3130; over 400 points, and then the continuation of the uptrend in the months and years thereafter, following a map of the higher timeframes and a simple math equation.

This group now has members in Europe, US, Asia and Australia, all from word of mouth. This small operation of providing alerts for traders has grown into a service where traders are provided with an in-depth analysis of 'market trading' and one of the most complete trading books available that provides the 'window into the future' that most traders seek.

**Analytical Market Trading (AMT)** '*a window into the future*' is based on technical analysis using components of 'Time', and in reality time governs the way we trade and the type of traders we are. I put traders into three categories because it simplifies the process and you will probably find yourself lurking within the boundaries of one no matter how you trade. My job is to put you in all three.

The long-term investor, the medium term cycle trader and lastly the one that is most desirable and glamorous, the intra-day leverage trader are those categories, but sadly the one we desire the most for many is also hardest to become, and statistics support this. I'm not the one making the rules and you can't be blinded into thinking you will become a successful short-term derivatives trader until you understand the Risk of each trade.

This book will take you those steps closer to becoming all three, because I don't want you to become 'just' a short-term trader, I want you to be able to maximise the potential of each category and the markets ability to generate wealth. I want you to succeed in all three and my job is to open your eyes using what's within the pages of this book and help fulfil your own potential and rewards that comes with the job. Those rewards are not only about money; it's about lifestyle and mapping our future.

In reality short-term trading is about as faraway as you going to get from creating wealth. Trading full time is a lifestyle choice and for most it's not exactly a financial one. And that's the reality! This book is about developing the skills, the systems, and the trading plans to give you the ability to make more money than working for someone else and creating wealth along the way. That is what every trader should seek and desire without question.

This book will simplify the theories of Fibonacci, Market Profile, Gann, Geometry and Elliot Waves to become the one and only methodology that is truly governed by Time, and not curved fitted after the event like most others.

I hope that this book will become an important reference in your trading and investing career and help you evolve within the three categories that I believe we should all succeed in.

## **The beginning.**

I want to start at the beginning because most of us have been down that path, or for others this could be just the beginning of a journey that can be very rewarding or at the same time soul destroying. Let me spell it out, trading is NOT easy, it can easily swallow you and spit you out, the market doesn't care how much knowledge or money you have, if you don't understand the game of numbers then you could be heading down the path that many venture, losing money!

I started trading futures markets in the early 1990's; actually I entered the market 3 months before the 1987 stock market collapse and lost most of my money. I learnt quickly the pains of the market but I also wanted to understand and develop a method so that pain would not occur again. This led me into the quagmire of technical analysis.

My first foray with technical analysis began with Market Profile. Over the following years I moved into wave analysis and Fibonacci trading techniques. What wasn't growing as quickly as the knowledge I was acquiring was my bank balance. I knew one thing though, the methods that exist in the market place fail to deliver because the trader in question fails to deliver. Trading is about psychology as much as it is about trading techniques, so I was as much to blame as any method I was using.

Over the years my methods developed into a hybrid of techniques that was suited to short term trading with a clear understanding of what was occurring in the higher timeframes. I also began to understand the concept of compounding, developing a system that was a path to wealth in latter years. I wanted to cover the short-term aspect of trading whilst knowing that my future was going to be catered for when I retire by investing smartly. That is why I think the last chapter in this book is the most important and all traders should learn and immediately develop a similar system tailored to their own needs so they know in the long run their ability to grow RICH is attainable.

Successful short-term trading was still my desire, but there was something still missing in the puzzle of my trading experience, knowing the 'When'.

Why markets moved 'When' they moved, why they reversed 'When' they did, and why they consolidated 'When' they did. I didn't want to be a systematic trader using computer-generated alerts but someone who had a predefined profit objectives with every trade in a systematic fashion because of the 'When' factor'. I'm sure right now any trader or person reading this would argue that this 'when factor' could never be predetermined in the future, and I would agree if the markets were under the influence of human sentiment, but I don't believe this is the case anymore.

With the advent of trading moving from the floor to full automation, the market became more erratic in nature but the movements became more predictable. **Time** became more important than Price. My trading success took off after I had back-tested two years of intra-day data of the index futures on the Australian market (SPI) and documented the statistical information of each price movement in the trading day. *(And to this day it is as valid and valuable now as it was then.)*

I noticed that the market moved in a precise manner and in optimum time periods with a high statistical probability. These moves were occurring in the same place and the same time. I began to realise that the random nature of traders entering and exiting the market based on their set-ups could not make these precise movements that were occurring all the time. I concluded that human sentiment had been replaced by computer-generated systems used by the large institutions and hedge funds that were the driving force in today's market behaviour. The documented statistical data based on the open of the trading day in relation to the past 5 days was the backbone of my trading as it provided myself with the 'When' factor or the 'Window into the future' that I was seeking. I developed a system called the **Single Day Cycle (SDC)** that allowed me predetermine the trading day before the open of the market. This was not a forgone conclusion, it only allowed me to trade the variables when the market was aligned with the data, but it did allow me to swing the odds in my favour each and every day.

Before I started this book I flicked through the many technical trading books I had bought in the early/mid nineties and found how most of them would find it hard surviving in derivative markets nowadays. Techniques need to evolve as markets evolve. The recurring themes in most of the books were, *'you don't need to know what is going to happen next to make money, anything can happen and every moment is unique'*. Either the trade works or it doesn't! I agree in principal but throughout this book there will be a strong argument why today's markets have evolved to a point of knowing 'where' the market is likely to go is advantageous. But let me clarify one thing, I'm not in the job of prediction and this book is not about predicting the market, I'll leave that job for a fool in paradise.

This book will cover my statistical probability information (SDC) that doesn't exist anywhere else. The book, the methodology and the theory all stems from the concept, that TIME is the most important thing in the market place and every trader needs to fully understand the importance of TIME so they can maximise the potential that exists when they are trading today's dynamic markets, and as importantly understand 'Market Risk'. Market risk and individual risk are completely separate things altogether.

Trading is about identifying the areas of Support and Resistance within the market structure, but as simply as it sounds the concept of static areas simply don't exist. The market is dynamic and so are the support and resistance zones. This book will help identify these zones with a simple mathematical calculation that is generic to all and not some haphazard model that is curved fitted to suit the author or developer.

## **Analytical Market Trading will take a detailed look at the following...**

- AMT will show you why TIME is the most important thing when trading and is the only thing that can provide the necessary data for probable future moves.
- AMT will show you the most advanced techniques when trading derivatives markets and help you identify Market Risk
- AMT will provide you with sequential data (SDC) that will help you pre-empt the next move and understand Risk using the standard deviation of Time.
- Understand why the beginning of the month is one of the most important TIME'S for trading any derivative or stock.
- Learn advanced dynamic timing techniques using one simple mathematical equation that provides you with a 'window into the future.'
- Learn advance swing techniques using Time.
- AMT will help you identify the next big move and help you understand the rhythm and cycles that are unique with each derivative or stock traded.
- AMT will show you why we picked the lows and subsequent rallies with precise accuracy in both 2002 and 2003, and then major rally into 2005 and beyond.
- AMT will take a close look at incorporating the 'RANGE' bar and developing trading systems based on the movement of Price of a certain Range.
- AMT will also take a close look at generating wealth, how you can become RICH with the simple concept of compounding over time.

Don't be overwhelmed with the concept of Time; **time is a simple generic definition of a period**. A day in the week, a week within the month, the month, or even minutes within the daily structure all falls under the concept of Time. There are no percentages, no ratios, geometry, wave structures or any other haphazard variable used to confuse the reader.

**My job is to make this as simple as possible because trading should be a simple process.**

The first few chapters will build the AMT model before we get into the nitty-gritty stuff and by the end of this book each of you should be focusing and trading using leverage within the three categories I believe is necessary to become a success in the market. I recommend every trader needs to use '**leverage**' because it increases our ability to generate more income. Leverage comes in many forms; Margin lending, futures/derivatives, options and contracts of difference (CFD's) should have the retail market covered, however the potential to increase the dollar loss if strict individual rules are not adhered to are also intensified.



## Introduction:

There is a saying 'A picture paints a thousand words'. In terms of technical analysis, a chart paints a thousand interpretations. The numerous methods to analyse price action on a single chart are mind numbing. From the successful marketing of these techniques over the years, we are now confronted with choosing which one to use or the one that is going to guarantee the most success. Sadly, none can claim this! Most often, they fall into the flawed methodology of analysis.

Fibonacci, Gann, Murray Maths, Elliot wave, Astro-cycles, Market Profile, Geometry and most other obscure methods have a tendency of leaving the analysis open to interpretation. They fall into the category of 'trade and hope', or the classic quote, *'every moment in the market is unique'*. Statistically they have a 50% probability of working or not. Only tight money management techniques will keep you in the game. This, of course is correct! Without money management techniques the most robust methodology will fail in the long run.

The only trading methodology to claim any success is systematic trading based on systems with a positive expectancy of dollar reward. As long as the system has been back-tested over numerous years, along with the use of strict money management rules and the drawdowns don't wipe you out, then the system at years end should be in 'Profit'. And this is the crux to all trading and the goals we set; too 'profit' in the markets. Systematic traders don't necessarily care what the chart is saying or where the market is going; when their system generates a trigger, they trade it!

**No matter what the chart says I will trade my systems, my plans and my set-ups regardless of any preconceived idea, interpretation, or perception I have of price action within the three categories.**

Systematic ideals towards trading are a lot different to what most discretionary traders believe guarantees success. Even though both types of traders believe success lies in strict money management, the psychology of the methodologies couldn't be more different. One is based on profit objectives using predictive forms of analysis, whilst the systematic traders believe any predictive form of analysis is doomed to failure. You will probably find most fund and institutional traders making most of those trading decisions based on the systematic approach, whereas the retail trader will favour the discretionary approach.

Most discretionary trading methodologies nowadays are hybrids of earlier methods used. The most famous ones are Elliot wave and the Dow theory. Some unique methods have come along and given a different perspective on market action, namely Peter Steidlmayer and his Market Profile theory. As the markets moved from the open cry pits to the computer age, so too have the methodologies. These methods that have evolved have a high correlation of trying to predict the next market move. These new techniques are basically the trader's own observations of how the market behaves. Any robust methodology open to interpretation would be accompanied by trading set-ups that have high probability scenarios.

Traders that would fall into this category would be, Larry Williams, Joe Ross, and Joe DiNapoli. Whether, a trader who uses complex forms of Fibonacci numerology or a trading psychologist, their experiences and observations in the market place will be the backbone of their theories. If one has failed in trading terms trying to predict the direction of the next move, then his or her bias will be, that no one else can! If another trader successfully trades using Elliot wave, which revolves around the theory of the future direction of the next wave, then their view of 'probable prediction' will have a place in today's trading environment.

All the theories mentioned above and the many others that exist still have the 'unknown factor'. They still don't know when these high probable scenarios will occur. It's fine to say that .618 of the range is a major support area but buying at this area still becomes a 'trade and hope'. This book is not about 'trade and hope', its about knowing that this set-up will have a very high probable outcome before it actually occurs. If the markets have changed to the point of being solely driven by these computer-generated systems then the market should become a lot more predictable. As the book evolves and we move from the first chapter until the last, then all these probable scenarios and profit objectives should become a lot clearer. Market Interpretation should become irrelevant!

Go to any large hedge fund or trading firm and they are crying out for mathematicians or anyone with a physics degree, why? Because they believe that the market dynamics are no longer seen as the product of random chance. Instead, robust predictability is a realistic expectation. They are continually looking to improve both the understanding of fundamental market process and the ability to predict market dynamics. They take an interdisciplinary approach to this research problem and are always interested in hearing from people with strong quantitative backgrounds in one or more of physics, mathematics, computer science or engineering.

So if that is the case, the random nature that existed many years ago and that is now saturated with computer-generated systems must have patterns in the market that are continually making precise movements. If the markets are dynamic and dynamics are determined by TIME, then we must find some way of calculating TIME so it will provide each and every trader including institutional traders an increased edge above their systems that already provide the positive expectancy that they operate under.

**I repeat; you increase the edge above the already profitable system that you are currently using.**

My trading has evolved from the combination of Market Profile Theory and the extended wave theory. The methodology is based on the use of the 'statistical correlation of Price over Time' and the 'extended movements of Price over Time'; **I've called it, 'Analytical Market Theory'.**

**The Core theory of AMT is the facilitation of Price over Time**, the rotation of price towards central zones as TIME moves forward. It is based on the concept of what Market

Profile tries to theorize, statistically returning to the most traded area, however Market Profile is based on Price, something that has already occurred, and is inherently late.

When we use central points of Time and do the same thing then the market is actually evolving dynamically. **The Core theory of AMT and the facilitation of Price over Time** is actually the rotation of price towards central zones and the extension of Price as TIME moves forward. But we still need to find the calculation to do this.

Most traders view PRICE more importantly than TIME. Their entry will be determined by the price that they have identified as a part of the methodology that they use. If their trading decision is based on a Fibonacci retracement at a certain level, then Price will be defined by that ratio as an entry point. Because technical indicators are based on Price and hence something that has already happened, then the indicator is inherently late. Whether it is a trend following system or an oscillator-based system, the methodologies are derived purely on PRICE, price that has already occurred!

TIME on the other hand is the only thing we know that's exists in the now and will extend into the future. There will always be a new timeframe once the current timeframe ends. Time will have an affect on Price, whereas, Price has no effect on Time. What that basically means is that, the timing of the trade becomes more important than the price traded. The methodology is about understanding that TIME is the most important variable when it comes to trading because TIME is the only thing that we are able to forecast. If we can find some way of forecasting TIME using Math and Price then the odds will swing in our favour for each and every trade, as I will explain throughout this book.

If one adheres to the methodology of 'profit forecasting' and risk-reward strategies then TIME needs to be fully understood in its role of affecting Price. If one can find some factor in that Time is forecastable, then related matters on Price can become a model of expectations for high probability trading scenarios. It is the passage of Time that is the critical factor in markets changing from rotating to trending, when these times occur the 'probability accuracy' increases and the Risk-Reward becomes more clearly defined.

Understanding and learning about Analytical Market Trading and the role TIME plays in the market we must also have some form of understanding of the universally accepted methodologies that exist in the market place today. Fibonacci ratios, Market Profile and Elliot-Wave analysis are three methodologies that form the basis of most discretionary trading systems in the market place. Gann is another name that frequently appears but the myth and the person behind the concept has been blown so far out of proportion that nowadays Gann is mainly frowned upon. Those three methodologies over the following pages will morph into the AMT model and we will then begin to see how each of those methodologies will subsequently disappear and traders 'could' solely rely of the workings of AMT. We will then begin to understand how each of us will have a better advantage of using one single model to trade from, swinging the odds in our favour for each and every trade in any market we choose.

## The Three Methodologies:

The major problem with all the universally accepted methodologies that are sold to the public is that they are flawed in so many ways. The reason they are flawed is because they are promoted as stand alone systems to trade from, there is no positive expectancy that any of these models will work on any given trade.

Let me explain...

**Fibonacci** is a series of numbers that progress by dividing the preceding numbers by 1.618; the '*a~golden-ratio*'. Some traders believe Fibonacci ratios manifest themselves in the markets in a way price relate to each other in size and duration (time). Hence, traders use Fibonacci ratios to estimate the size of futures price moves by, either one in the opposite direction of the most recent trend move or the next leg of the existing move.

**Market profile** was developed by Peter Steidlmayer and involves the understanding that all competitive free markets continually search of those prices at which to conduct the greatest amount of business, or market logic terms-facilitates trade. When Peter Steidlmayer introduced the concept, many traders believed it to be a major breakthrough in market analysis and trading, since it offers a logical and organised set of price and volume data from which traders can base trading decisions. Market profile concept of trading is using the most traded area or *the value area* as an attraction and the standard deviation of the range as a guide. This concept is also based on visualisations. As Peter Steidlmayer the developer of Market profile once described his theory, '*three basic relationships hold the key to understanding the nature of markets. These relationships take us from the past to the present and into the future, thus giving us an insight to the markets.*'

**Elliot-Wave** is cycle analysis based on TIME; time spent moving in the direction of the previous move based on the natural law of nature and science. (Fibonacci). A series of waves and counts developed by Elliot and DOW are examples of cycles within the market place. Dow Cycle; the three basic movements in the market are defined by, the Primary trend, the Secondary Swing in the opposite direction and the Minor Trends, or the day-to-day fluctuations within the Secondary Trend.

The Primary Trend lasts at least one year but may last for several years and consists of a series of broad wave-like movements that are interrupted by secondary reactions. So long as each successive rally reaches a higher level than the one before and each Secondary reaction stops at a higher Price than the previous low point, then the Primary Trend is UP, most commonly known as a Bull Market. Secondary Reactions or intermediate trends are declines in the opposite direction of the Primary trend and these can last from several weeks to a few months following a strong advance. The Minor Trends are brief, usually less than two or three weeks of fluctuations.

All these three models fail in no uncertain terms is because all three do not have any positive expectancy, however they are all heavily promoted and sold to the public. Traders need to understand too succeed in the market they need to have a firm understanding of the 'NUMBERS GAMES'.

In My Opinion, the fundamental problem with these types of methodologies, Elliot Wave, Fibonacci Expansion and any other technique of labelling past price action is, we never know when each peak or trough will end, when Price will reverse back to .618 of the range or extend in the future using any of the fibonacci ratios. We don't have a 'Window into the Future'. Most 'forecasting' methodologies are based on Range of Price and fibonacci expansion techniques using a multitude of fibonacci ratios whether it's Elliot Wave, Gann or Geometry. These methodologies project any future 'expectation' and then try to explain that there is a 'Time' component as the driving force behind the theory, as in 'Time and Price', but in reality they are only curve fitting this component to suit their methodology. They will say... *'Time' between this Peak and Trough will project this future move*, but they have no idea when the peak or trough begins or ends until the market actually retraces a percentage fibonacci ratio and afterwards readjust their methodology to make the next their next 'model of expectation'. An approach that is very haphazard.

The trading edge of Market Profile was based on understanding market action but few traders became successful profile traders. It appears they expected too much, they wanted more of an edge; they wanted a model to trade. The problem with the theory was the understanding of the market for the day, the market didn't consist on one days trading; it consists of a number of days. Today's results are poor predictors of tomorrow's action. There was a missing link.

AMT doesn't curve fit, because my methodology is based on Time and 'only' afterwards the Range of Price. Whenever a 'new' timeframe begins a new dynamic range is defined, no matter what price action has occurred in the past. And this is important if you want to truly understand the 'structure', the 'cycles' and the 'dynamics' of today's market. I think the big difference between most forecasting techniques is that they are fixed on the price completion of targets based on the past before they can make another model of expectation. A static concept!

Some will argue it is dynamic but in my opinion they are not, because it based on the past, something that has already occurred. My methodology is based on TIME, something you forecast in the future, i.e. the beginning and end of each timeframe. Of course there is more to it but I hope this book gives you a better understanding of the cycles in the market of knowing when too trade, when to go CASH, when to take profits and as importantly when to take losses.

I want to say that all methodologies are just guides, nothing more and nothing less. I don't care about market interpretation or market expectation unless there is a statistical component behind the theory or trading system spoken about.

I personally spent many years with market-profile and many others but I didn't have much success in developing any working models using each as stand-alone methods because most are infatuated on 'Price' to make certain trading decisions. However market-profile did allow me to understand the concept of rotation within the market. The market's ability to rotate back towards the past and most traded areas is something that most traders need to grasp.

The relation between Price and TIME will become clearer as you continue with this book and you'll learn some techniques that take the Market Profile theory a step further, by projecting the past and providing 'value' areas in the future, something Market Profile wasn't able to do.

I don't want to get bogged down with this concept so early in the book about combining Market-profile and Fibonacci, this will become clearer as you continue with the book but I want to touch on this briefly. Both Fibonacci and Market Profile in my opinion fail as stand-alone methods. One hopes to predict the unpredictable and the latter has statistical price action without any idea of what will occur in the future. It is very difficult to auto-mise or develop any system based on these two theories alone. What would happen if we have a combination of the two? Taking what has occurred in the past and statistically providing probable moves into the future to designated zones based on Time, Range & Price. Statistics of science and mathematics does support the notion of this concept.

### *How will it do that?*

Market Profile Theory statistically proves that price will return to the most traded area, 'the value area' or as some call it 'Point of Control' (POC). Fibonacci takes what has occurred in the past and through the science of mathematics projects extended movements into the future. The argument though, is that the market is non-linear, so any form of predictive analysis will fail. Whereas a non-linear market provides the perfect environment for Market Profile to flourish. A discretionary trader trading the smaller daily cycles or an intra-day timeframe essentially sells against all trends; short, medium or long. The reason why she trades against all trends is that, she expects prices to rotate back to some central point. If the market spends more time rotating within itself and making extended moves as time moves forward then combining the two concepts would provide a very robust methodology. The combination of the two has the potential to form a predictive model with high probability of success.

By combining the two forms of analysis to form one model based on TIME, we have the ability to know that past value areas of distribution will be projected forward and provide the 'profit objectives' we most seek. Most discretionary trading is based on the 'probability' outcome. The probable move theory based on the wave extensions of past data along with the combination of the statistical outcome forms the backbone of trading any Organised Market.

This is why the book and the AMT model develop by myself will help provide the necessary tools in identifying the cycles in the market. From the Primary trends that Dow and Elliot spoke about, to the intra-day cycles that most short-term traders look for.

AMT provides an extensive look at **three ‘period-dynamic’ cycles**; this has to be one of the most powerful things for any trader to know. AMT takes a close look at Market profile but instead of using Price as the ‘value’ area, AMT uses TIME to provide the necessary information of Value so all traders can develop trading systems. AMT provides the perfect tools for the non-linear market environment and also shows why human sentiment that used to be the driving force behind the market is now replaced by computer generated systems that make today’s market far more predictable.

For each derivative trader; knowing when to trade the open or when to trade at the end of the trading day from the extreme of the Price-Range back towards the central point is as important as trading with any probable trend. In my opinion, **it’s the dynamic nature of the markets today along with the concept of TIME as the only tool that allows traders to do this accurately.**

Note: At the beginning of Chapter 1 please inset the CD provided, as this will be used to help clarify all the illustrations and charts within the book for visual reference.

# The 'Numbers Game'

As I said earlier... *“ Let me spell it out, trading is NOT easy, it can easily swallow you and spit you out, the market doesn't care how much knowledge or money you have, if you don't understand the game of numbers then you could be heading down the path that many venture, losing money!”*

Successful short-term trading I'm assuming is high on people's desires, however many fail to cut the mustard for a number of reasons. I'm not going to go into detail why but I could fill the remainder of this page with the amount of things that add to the demise of any trader entering the world of derivative trading, and statistics support this.

In a nutshell most traders fail to understand the 'numbers game' or what they are seeking from trading in monetary terms. The rules and goals we set.

Trading for some is a job, business and a career. It can pay well but operates under a different system compared to many other jobs and businesses. It operates under the random distribution of wins and losses, basically you don't know when and how much you will be paid.

Most other jobs and businesses pay!

You go to work, do an honest days labour and at the end of the day you know you will be paid and how much you will be paid. Imagine your job operated under the same system as a trader; you went to work with the knowledge that you 'could' be paid, might not be paid, and/or worked for eight hours and then actually losing money, paying someone else.

Imagine a professional trader having a losing month as many do. When you look at it, the trader has gone to work for a month hasn't been paid and actually paying them out of his own pocket to do the job he desires. Not something I would consider a very appealing career.

Traders operate under this system, but even a good trader still operates under the knowledge that their wins and how much they win are still random. She knows how much she will lose per trade because a professional trader will have predetermine stops in the market place and normally this will provide the trader with the \$dollar amount but her wins will not always be what she desires. Most short-term traders will have predetermined profit objectives but these profit objectives don't always hit, so her \$dollar reward per trade is still random.



This is a difficult career to master so the trader needs to continually find the edge so that they defend their accounts whilst attacking when the odds are in their favour. Systematic trading based on parameters that have been back tested over numerous years using a number of individual variables and rules should give each trader an edge because these systems will have a 'positive expectancy', and positive expectancy is the crux to trading because an expected scenario is implied and we profit in the market. This is why we trade, isn't it? However the positive expectancy we seek is still random.

Any trader that wants to trade needs to be systematic and trade his or her own individual systems that have a positive expectancy. One thing that traders need to be reminded is that the past isn't a guarantee for the future, just because a system has returned 62% doesn't mean it will continue to do so in the future. The biggest draw down is always around the corner if strict money management rules are not adhered to.

Once each trader has been able to develop a system using rules and goals that they have set and back tested, they still need to be reminded that the trader will operate this system. If the system has a positive expectancy of 50% then the dollar reward can only increase by increasing the position size of the trade. And traders should seriously consider increasing their position size as the account grows because the reason why we trade is the dollar return we desire. By that I mean, if you want to be a full time trader you need to work out your own cost of living and everything else, and then make sure that the system is able to cover this.

*"In a nutshell most traders fail to understand the 'numbers game' or what they are seeking from trading in monetary terms. The rules and goals we set."*

So if you want to be a day-trader then you need to develop a system that is able to trigger more than once per day because if your first trade is a loss and the system doesn't trigger again then today you won't be paid. The whole idea of being a day trader is making sure that you do not have a losing day, so you need to make sure that over the course of the day the system is able to generate the numbers and trades that return the positive expectancy we want to operate under and give us the dollar reward we seek. Today you will be paid, if not, **you would be better off working for someone else until you can master this.**

Each individual needs to define the trader they want to be, short, medium, or long-term and develop systems within these parameters with strict rules. Traders also need to set goals, these goals and rules must have a monetary value because this will determine how each will live. It's not always about living today, it's also about planning for tomorrow's years that is most important. I can't emphasize this enough.

My job through the information within this book is to make you all three, a trader within all three categories that I believe helps us maximise the potential that exist in the marketplace.

And this is how I'm going to do it....

# Analytical Market Trading & *‘a window into the future.’*

## Chapter 1.

Analytical Market Trading is based on the statistical correlation of Price over Time, and the extended movements of Price over Time. The methodology is about understanding that TIME is the most important variable when it comes to trading derivatives because TIME is the only thing that is forecastable. If we can find some way of forecasting TIME using Math and Price then the odds will swing in our favour for each and every trade.

If one adheres to the methodology of ‘profit forecasting’ and risk-reward strategies then TIME needs to be fully understood in its role of affecting Price. If one can find some factor in that TIME is forecastable, then related matters on Price can become a ‘model of expectations’ with high probability trading scenarios. It is the passage of TIME that is the critical factor in the markets changing from rotating to trending, when these times occur, the probability-accuracy increases and the ‘risk-reward’ becomes more clearly defined.

Throughout this book I will be repeating the core message of AMT because I want traders to have the model embedded into their thoughts. The message of Time is the most important component for a number of reasons because it will help the psychology of each trader on two fronts. Firstly, it will help each trader ride any trend as long as possible and secondly it will help remove any fear that might effect a trader, and traders do have the ability to sabotage any trade by thinking of negative outcomes even though there might not be any around. I’m not going to expand on this belief just yet but hopefully this belief of mine will also become yours by the time you have finished with this book.

After reading ‘the numbers game’ we have an understanding that the only methodology that can claim any success is systematic trading. As long as the system has been back-tested over numerous years, along with the use of strict money management rules and the ‘draw-downs’ don’t wipe you out, then the system at years end should be in ‘Profit’. And this is the crux to all trading and the goals we set; too ‘profit’ in the markets. Systematic traders don’t necessarily care what the chart is saying or where the market is going; when their system generates a trigger, they trade it because of ‘positive-expectancy’ of dollar reward. And each system must have some element of TIME for each trader too maximise the trading potential of any market. It is the element of RISK what all traders want clearly defined, and by using the TIME component then all traders will have a better understanding of what Market Risk is.

Individual Risk based on individual set of rules and stops is completely different to what Market Risk is, sadly many traders don’t realise this. I will help you have a better understanding of this as you continue with the book.

## Time.

I firstly want to describe the five stages of 'Time' that exist in market-structure. Each stage is bounded by the higher timeframe. The major trend is the highest timeframe of the six, that being the *Yearly* timeframe, this is then followed by the *Quarterly* timeframe, *Monthly*, *Weekly*, *Daily* and lastly the *intra-day* timeframe. The intra-day timeframe and the optimum timeframes inside the daily cycle will be discussed in a later chapter.

- Primary Trend = Yearly Timeframe.
- Secondary Trend = Quarterly Timeframe
- Intermediate Trend = Monthly Timeframe
- Lesser Trends = Weekly and Daily Timeframes

The reason why we identify the stages of Time is because these stages define the dynamics of any market.

Math, Time and Price define the dynamics of the market. However, the dynamics of the market are easily bandied about by many but seldom defined by using visual price patterns. In fact, many define the dynamics of the market after the event has occurred. (No pointing the finger at all you Elliot-Wave chartists.) Like Elliot Wave, the first stage of any market structure begins with the Primary Trend.

Figure 1 is the daily charts of the index futures of the Australian Market (SPI) of the yearly range of 2002 and the early months of February 2003. This chart represents the random nature of price but it also shows how Time projects the next support level and likely area where price will be projected into the following year, that being *down!* These support levels have dynamically moved lower as Time moves forward.

### *How is this achieved?*

The indicator, as shown in Figure 1 is used as a reference point for TIME. It takes the range of the past timeframe and projects it forward into the following timeframe. The closing price sets up the range for the following 'Time' along with the Range of Price based on the Timeframe in question.

Many traders will know the name for this, the pivot point. Most professional traders that have spent time in the trading pits used this as a reference point for their trading and it is still very valid for today's market. The areas (shaded) provided these traders with a floor and support, reversal reference points and, if broken, a major trigger for the trend to continue and for the floor pivot to become resistance. You can argue that these pivots do not have any positive expectancy either, however there is an 'Observed Phenomena' that occur around these levels that all traders can develop models of expectation of future probable moves, as I will describe throughout the book.

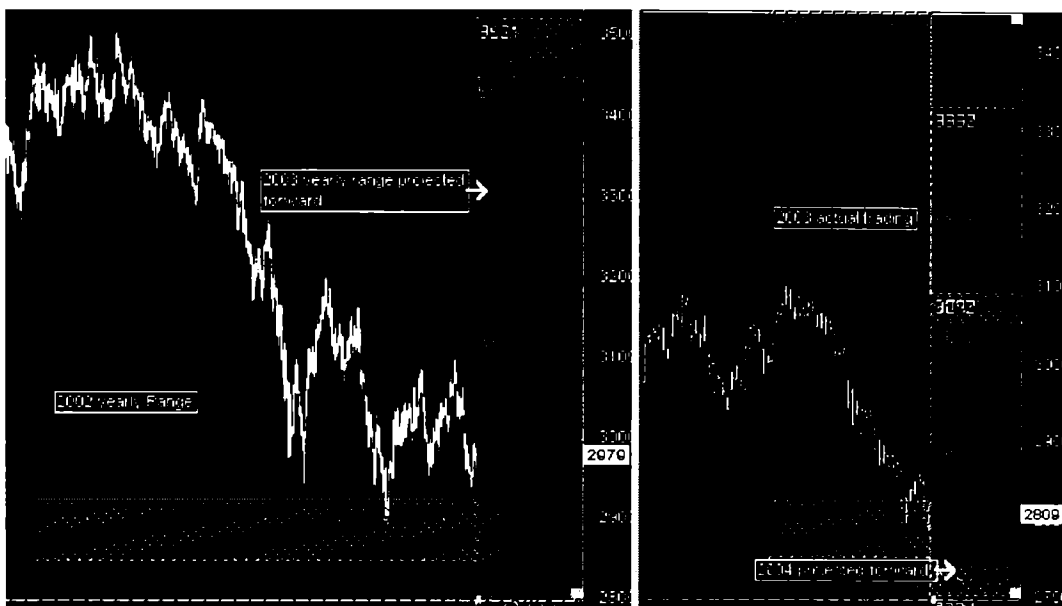


Figure 1.

The Yearly timeframe defines the major trend of the market. Whilst price is below the 50% level for the year then the major trend (Primary) remains weak and provides a probable area for Price to move towards, some 300 points lower for it to find the next support level when the new year of 2003 begins. (*Keep in mind the 50% level for 2003, 3130.*)!

*How do we calculate the indicator is question?*

We take the previous years trading range and the closing price of the timeframe and calculate the  $HIGH + LOW + CLOSE / 3$ .

This calculation determines the balance point (50%) of the next timeframe. The indicator in (Fig 1) is commonly referred to the '*Floor Traders Pivot Point*' and was one of the earliest indicators used by traders in the US grain markets early last century. Even in today's derivative markets that have replaced the floor traders with computer-generated systems, their role is invaluable. This simple mathematical equation is the only one of two that I rely on in determining high probable price projections within the market structure of 'Time and Price'. This indicator defines our Trends!

**Whenever I mention the 50% level throughout this book it will be based on this calculation. The 50% level is dynamic and moves with Time. It is called the Balance Point.**

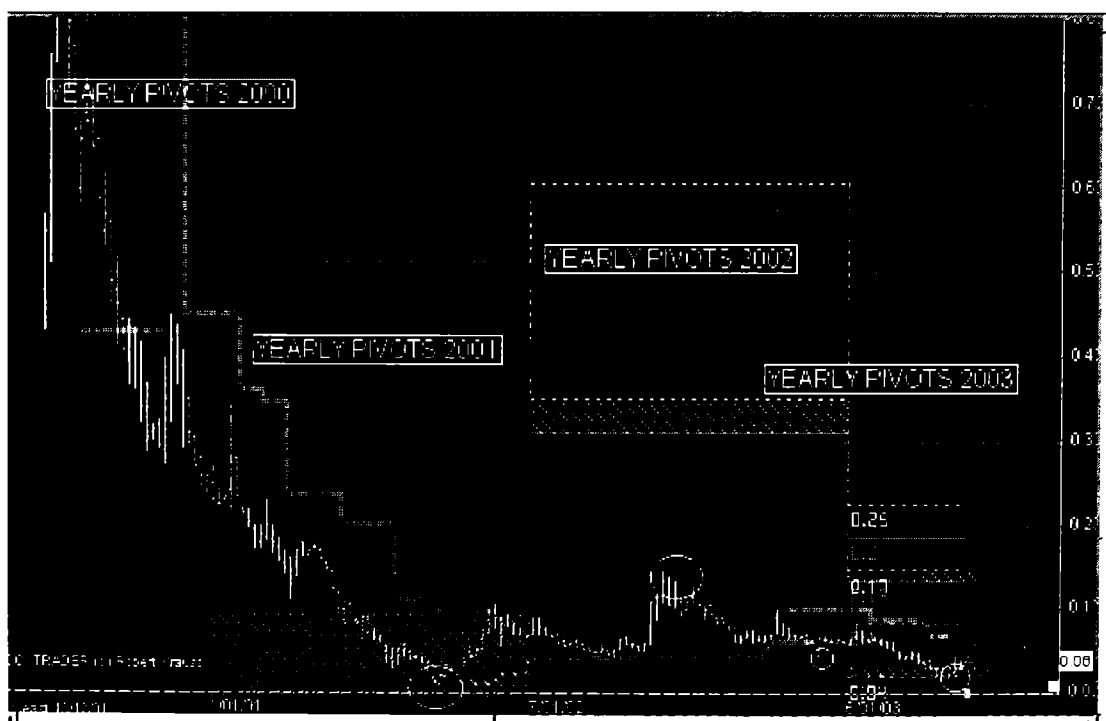
When defining our primary trend we must first calculate the balance point or 50% level for this trading year. So we take the entire range for the previous year and apply the calculation of  $H + L + C / 3$ , this will then give you the 50% level for this trading year and it will be the guide of the Primary trend of the stock or derivative traded. Once we obtain the 50% level we then take the entire range of the previous year and place it over the top of the new balance point, this will then give us a new dynamic range based on the previous trading year, TIME.

This calculation is used on all the stages of TIME as described early (intra-day not included) and each dynamic level will play an important role for the market path of price as will be shown throughout the book.

Notice in figure 1 the range lows for 2002 (left chart) played a supporting role. These range lows are calculated from the previous trading year in 2001. When we look at the chart on the right, 2003 was projecting lower lows; we already had a lower reference for the year 2003, we had a 'model of expectation' that the market 'could' fall further in the new year, and it did nearly 300 points in early 2003.

Lets look at some examples of how the primary trend based on TIME plays a role. The first stage of TIME must be the Yearly timeframe and will be the base of the market structure. Whether trading any index, derivative, or stock, this Timeframe will define the Primary Trend.

Figure 2 shows the stock (SEN) after the climb in 2000 on the back of the tech-bubble we then follow the dramatic fall of price over the course of the following 3 years. Firstly we can see price moving down to the 2001 yearly pivots lows, we can also see that once price moved lower that the yearly pivots lows, TIME formed resistance of Price for the remainder of the year.



**Figure 2.**

Note: The red dotted line in the chart is the 3-month cycle based on the dynamic 3-period cycles and will be explained in detail in later chapters.



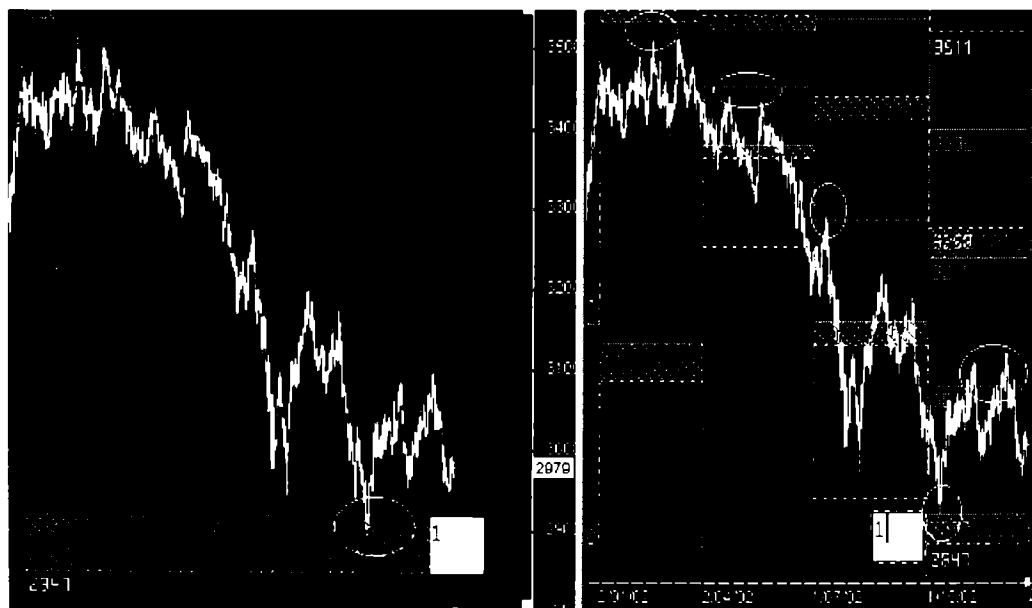
Figure 3 takes a closer look at SEN and it wasn't until the 'new year' was Price allowed to move higher. Price moved from the 3-months lows (red line) back towards the new yearly 50% level of .17 before Price failed and rotated back towards the monthly lows once again. Then when the New Year begins in 2003, the stock was sold down from the new yearly 50% levels of .11 cents down to the new Yearly floors once again before supported once again. In late 2005 SEN hit a high of .91 cents.



Figure 4 shows the same primary trend in play on another stock, CBA. We can see the highs for the trading year where clearly identified in both 2001 and 2002. We can also see that the primary trend was clearly identified at the beginning of the trading year 2002, where this zone provided the platform for price to make its way towards the new range highs for 2002. (Note: White lines are the 3-period cycles that will be described in Chapter 3).

The yearly timeframe and calculation is universal on all stocks and derivatives traded. Once we have identified the primary trend we then move down in order to the next lower timeframe, the Quarterly timeframe. The quarterly Timeframe is the secondary trend and you will notice throughout this book, the secondary trend is based on 3-month cycles of trading and we will see that most corrective moves in the market will be based on this timeframe of 3 months.

Figure 5 represents the 2002-year and the Primary trend. The chart on the right (b) represents the same daily chart but is showing the Quarterly Time pivots. We can see that the high of the year had a ceiling in the first 3 months of the year but dramatically changed when the 2<sup>nd</sup> Quarter began and Price opened below the 50% of the new Quarter. From then on, Price was under pressure in every timeframe, as the 50% level became resistance. When the yearly 50% crossed, (primary trend) then the major reference and target was the yearly floor price. We had a long-term reference point to trade towards. Once the yearly floor had been reached and the floor of the Quarterly Timeframe co-incident with the higher timeframe, it then became support and the risk-reward of 'Short' trading at that point in time had diminished to almost zero.



**Figure 5. Australian Futures Index (SPI) 2002:**

The Quarterly timeframe goes from January-March, April-June, July-September, and October-November. So when the quarterly timeframe ends we take the past Quarter and do the same calculation of  $H+L+C/3$ , we will then have a new 50% level (balance point) for the coming Quarter. Then we take the past Quarterly range and place it 50% either side of the new balance point.

Lets have a look at how important time plays a role and why my statement of ... *"It is the passage of TIME that is the critical factor in the markets changing from rotating to trending, when these times occur, the probability-accuracy increases and the 'risk-reward' becomes more clearly defined"* should be a lot clearer for many readers.

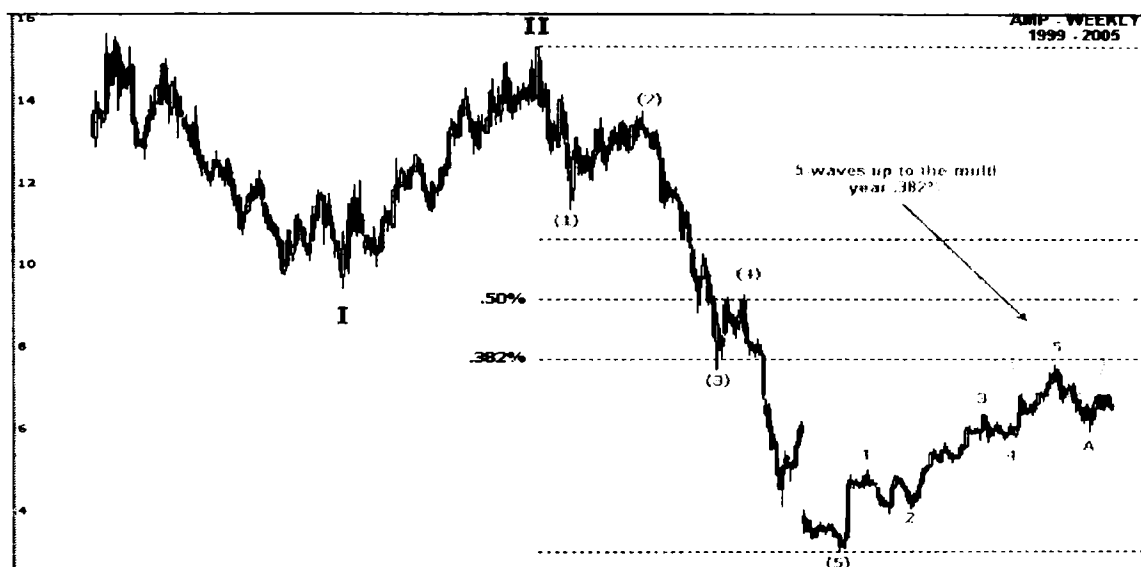


Figure 6

Figure 6 shows the weekly trend on AMP over the past 6 years. The trend is down and it is foolish to suggest that the overall trend has change even though it looks like it has turned up from the recent lows. Fundamentally there is something wrong with the stock over this period so personally I wouldn't be buying this stock just yet for my long term holding strategy, however I'm always happy to trade the stock based on larger timeframe cycles. And the object of this book is for you to do the same.

Let us introduce the balance point (50%) for quarterly timeframe. The reason we do this is because it helps define the strength of the trend for the next 3 months in advance, and it can give us a forewarning of any change of trend based on the movement of time.



## AMP Daily charts

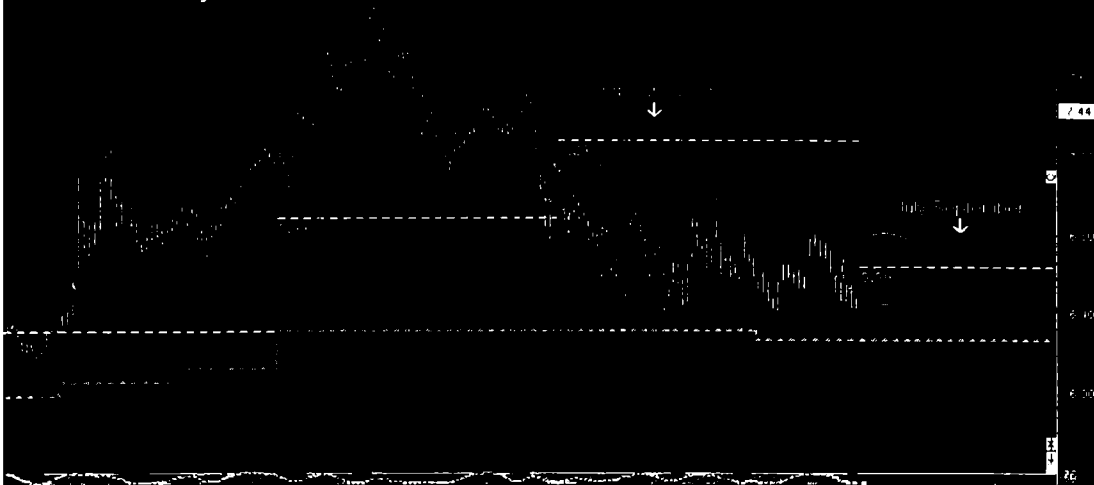


Figure 7.

We can see in figure 7 the early trend upwards in 2005; it is not until the new Quarter of April-June begins, price has gone from above the 50% level to below (7.28). On the 1<sup>st</sup> of April the cycle has changed and for the next 3 months we can see the stock under pressure.

As we progress into the end of the quarter and into the new quarter of July-September we can see that price is still below the 50% level of 6.64 on the 1<sup>st</sup> July 2005, the trend remains weak, however it won't take much for the stock to be back above that 50% level either. We as traders who want to trade on the long side are on alert, and any traders holding shorts are on alert that the stock could find some buyers and covering positions would be recommended.

As I pointed out to traders in both forums of 'Reefcap' and 'Datafeeds' on the 2<sup>nd</sup> July 2005...

*"And now in this Quarter the 50% level moves from 7.28 down to 6.64, however we are still below the secondary trend and price can easily begin another 3-month waves down.*

*Whilst I paint a bearish picture now it becomes apparent that we are only 10 cents away from being back above the 50% level and the secondary trend all of a sudden becomes our friend once again."*

It is not until the 21<sup>st</sup> of July that price does move above the new 50% level and 6.64 becomes a support zone as the next 2 months the stock continues upwards into the new Quarter.

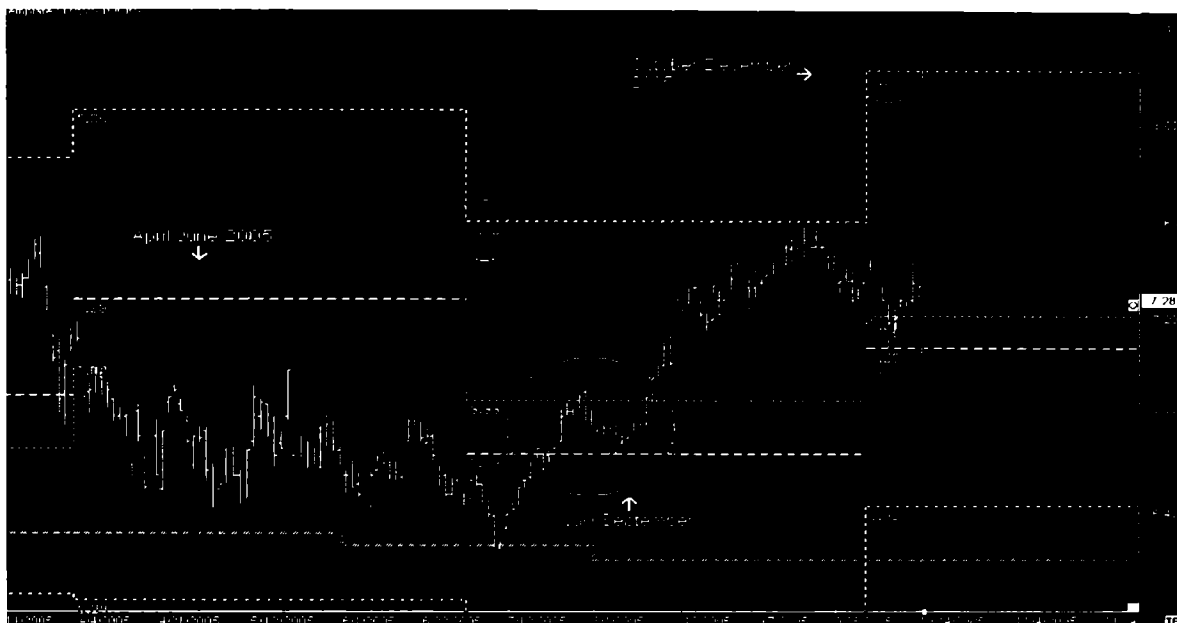


Figure 8.

Figure 8 is a perfect example of how time plays an important role in changing cycles and also defining the possibility of new levels of support/resistance levels within the market structure...

*“Trading is about identifying the areas of Support and Resistance within the market structure, but as simply as it sounds, the concept of static areas simply don’t exist. The market is dynamic and so are the support and resistance zones. This book will help identify these zones with a simple mathematical calculation that is generic to all.”*

Before we continue on with ‘TIME’ let’s go back and look at another methodology we described earlier as one of the universal theories that is accepted in today’s market, Market Profile.

*The crux of the theory and it being developed for trading purpose is, if we know where the greatest amount of trade is then statistically price will return to that area, statistically science proves the theory. We had the ability to determine value and whether we were paying too much or too little.*

I have a problem with Market Profile because the theory is based on Price returning to the most traded area, however the most traded area can only form when price is traded over TIME, this is the only way to form Value. Again time becomes an important element when defining ‘value’ or any level of support and resistance. I would hope that by the time you finish this book you are able to pre-empt where value might form within the market structure. Market Profile can only distinguish value after time has passed.

Let's look at how price returns to the central points of TIME and you will then begin to see that the start of any new timeframe will play a role in Price returning to these balance points in the future.

Figure 9 shows the market high in 2003 at 4131, this was the 50% level of the Primary trend. (Yearly). The chart shows price falling into the 1<sup>st</sup> July and the beginning of the new quarter of 3007. Of course this level defines the strength of the trend for the next 3 months.

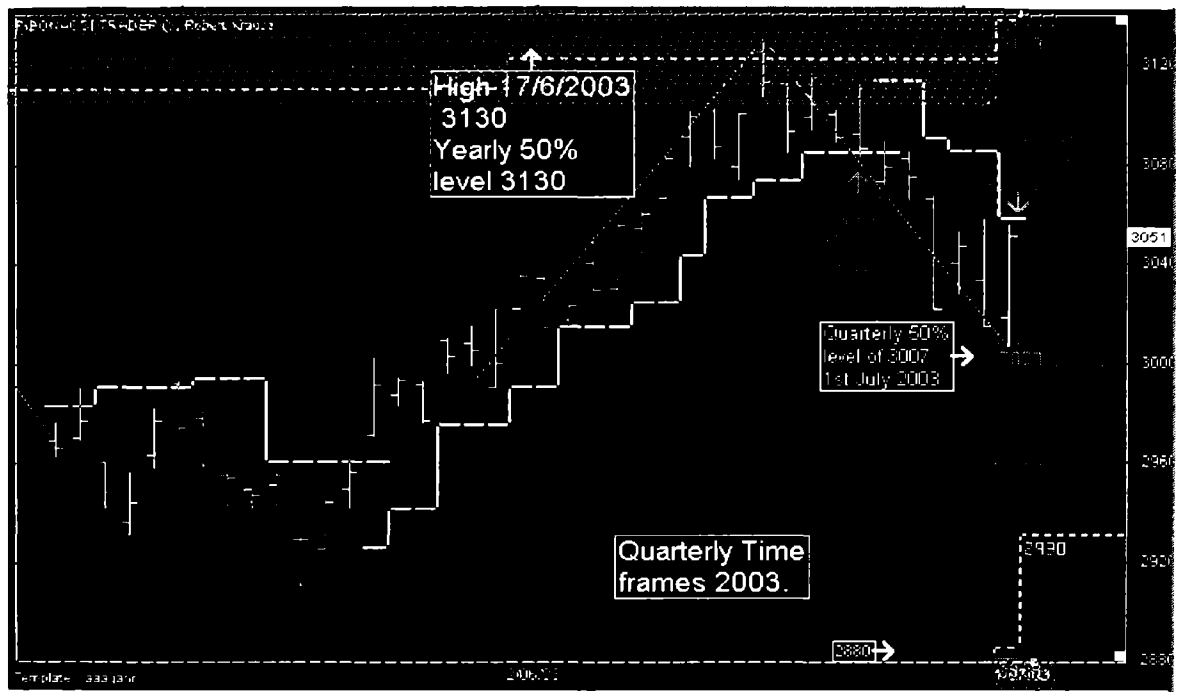


Figure 9.

**From:** ☺"amtrade\_group" <amtrade\_group@yahoo.com>

**Date:** Tue Jul 1, 2003 11:44 am

**Subject:** SPI arvo.

SPI has continued down to the new quarterly 50% level of 3007 and found support. This now completes the secondary corrective wave of TIME from the yearly 50% 3130 level, to the next timeframe.

This move is important and our attention now turns to how the afternoon behaves and because we now have a new monthly 50% level of 3053 that would look to be reached.

**\*\* This is an email alert that I sent out to members of AM-Trade.**

Figure 9 makes reference to the Australian Index Futures (SPI); the price action is over the course of the trading year for 2003. We can see that the high of the market was 3130 the yearly 50% level, this was clearly identified as our '**primary trend**' in Figure 9; we had completed a corrective move back to the highest timeframe central point. (Yearly)

We can see price sell off over the course of days, falling back to the 'new' quarterly timeframe 50% of 3007 on the first of July, this move had completed the **secondary correction of the secondary Trend**, we then had on the same day another new timeframe, the **monthly central point of 3053, this then was our intermediate trend and another rotation point based on Time**. On this day the market moved nearly 50 points when the average range is normally around 27 points.

When we look at the post to my subscribers on the 1<sup>st</sup> of July, we already had a model of expectation that Price had completed wave down and then another wave back to the new 50% level of the lower timeframe (monthly) was a high probability trade. The monthly timeframe is introduced as the next timeframe below the Quarter. We call the monthly timeframe the intermediate cycle.

*"SPI has continued down to the **new quarterly 50% level of 3007** and found support. This now completes the secondary corrective wave of TIME from the **yearly 50% 3130 level**, to the next timeframe.*

*This move is important and our attention now turns to how the afternoon behaves and because we now have a **new monthly 50% level of 3053** that would look to be reached."*

Using the central points of Time I can make highly accurate forecasts over the course of the trading year. Of course there is no expectancy to any of the forecasts I make, it only allows me to trade using strict plans, systems and rules that I always operate under. Those rules do have a discretionary element to them as I will show you throughout the book, and AMP is a perfect example, as I have just highlighted. I made a trading call in March 2003 to all AMT subscribers of price moving back to 3130 from recent market lows of 2680, over 400 points within the next quarter because of the phenomena of TIME. These central points of TIME is our way of determining where Value is without waiting for Price to trade over a period of time to form the 'value traded areas' that Peter Steidlmayer's theory describes.

In Figure 9 we can see the 3-day cycles in step formation (white). Once the high of 3130 had been reached, we had another confirming pattern on the 3-day lows breaking and price falling to the next Timeframe 50% level of 3007. These 3-day cycles will be described in detail in the next chapter and they are most important in defining and confirming the change of trend.

These movements of Price returning to the central points of TIME is one of the best features for swing trading whether trading the Primary trend for medium term cycle traders or any other timeframe as I will show in this and later chapters. This is also ideal for the intra-day traders looking for short-term trades from the opening of the trading day back to central points of the day range based on the market dynamics and the past 5 days of trading. (Chapter 5)

## **TIME Range's and Pivots.**

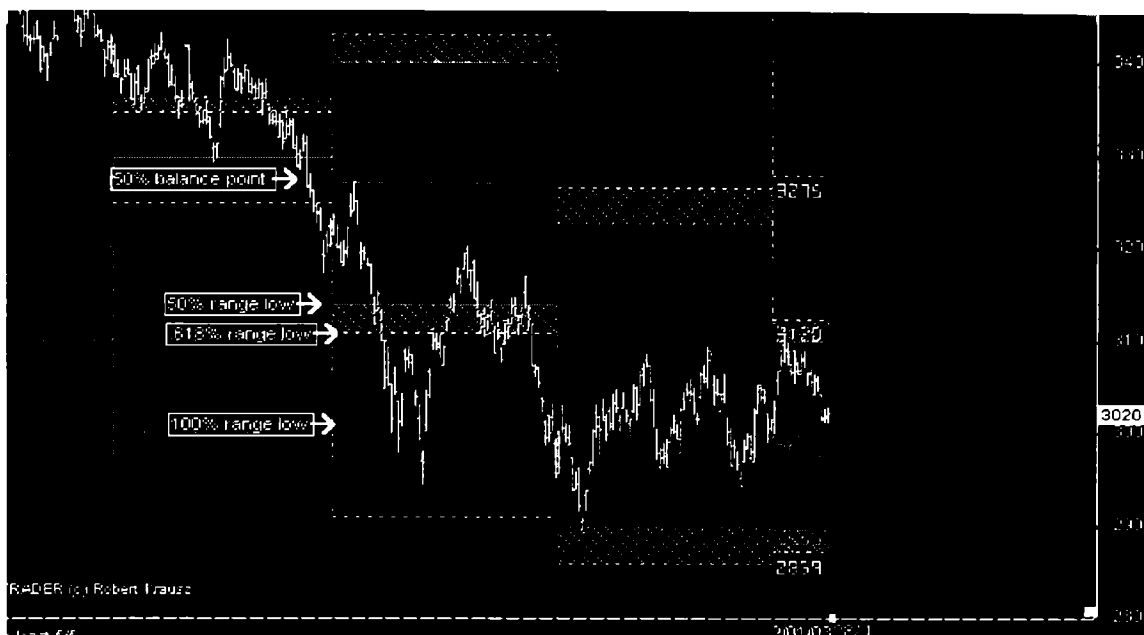
The Time Pivots are easy identifiable and easy to understand. A traders focus is normally only directed towards the daily charts with little understanding the importance of the higher Timeframes and the role they play when trading risk-reward scenarios. Without knowing what is occurring in the higher 'Time' frame you will have little understanding why Markets rotate when they do and where Price is likely to go within the market structure of Time.

The conventional approach to trading has been the buying or selling of potential market breakouts/breakdowns. The problem with this technique for any trader is, 'When' are the markets ready to break? Experience traders base their trading around the risk-reward scenario, so any trading occurring at the extreme of the range is deemed as 'risk' because the market has a higher probability of reversing until a new Time frame begins. Figure 13 illustrates how prices on the daily chart make new lows and highs, but as quickly as they look like breaking they rotate back into the centre of the range because the higher time frame becomes resistance and/or support. This is the trap that in-experience traders continually find themselves facing, as the adage goes, the public are the ones 'always buying the tops and selling the bottoms'.

In Chapter 3 and when we move onto market dynamics I will describe how I believe a valid breakout is defined, and there is a tendency for price to remain outside the break until the new timeframe begins no matter what higher timeframe is used. A similar concept is seeing a breakout of the daily highs and the trend continuing in one direction, but it is not until the next day (new time) we see a reversal back. The same applies on the weekly, monthly and so on. Outside the range and the trend is likely to continue until the new 'Time' begins.

The use of these Time pivots is universal in all equities and derivative markets. We can visualise trading opportunities through the use of Time. The use of these pivots and the visualisation on the higher timeframes I believe is a must for any trading decisions. If the professional traders are using them, so should you!

Let's take a closer look at the levels in each TIME pivot. Figure 10 shows the shaded areas that are part of the extreme of the ranges, these outer ratios play an important role when identify breakouts from the Time period in question and gives clear targets as part of any profit objective.

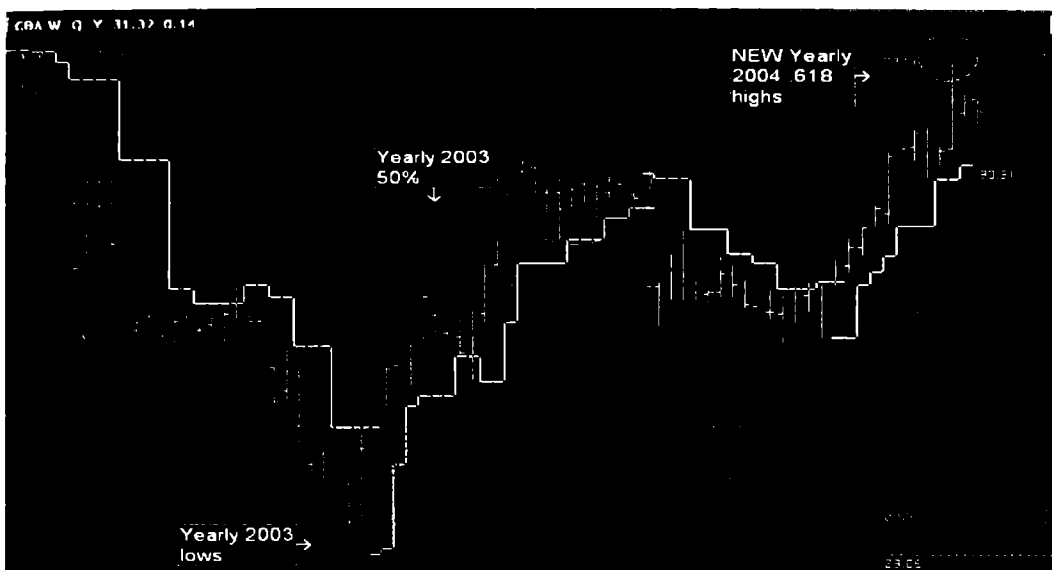


**Figure 10.**

Figure 10 shows the levels in TIME, we have an outer ratio being .618 of the range and we also have another ratio that is 100% of the range. How we calculate these ratios is by taking the past range and then add the .618 of the range (Fibonacci-ratio) and then place it over the top of the new 50% level. Taking the entire range and placing it either side of the new 50% level achieves the 100% ratio as shown above. These are the only fibonacci ratios I use. Basically we only use .50, .618, and 100%. However the big difference that each level isn't static, it is a dynamic concept and is always evolving. That is what the stock market does; it always evolves and doesn't stand still. We do this because we are calculating the concept of time... *"As 'Time' is the only known factor in the market that can be known in advance, and we subscribe to the belief that time is forecastable, then it is acceptable to believe that what ever happens in the past will somehow affect events in the present and which in turn affect events in the future. If we can find some way of forecasting TIME using Math and Price then the odds will swing in our favour for each and every trade."*

The ranges of Time are identified with the same calculation of  $H+L+C/3$  and play an important role because there are two distinct possibilities; #1 Price will either rotate back to these central points of Time or Price will make its way towards the extreme of the ranges with high regularity over the course of the TIME period in question.

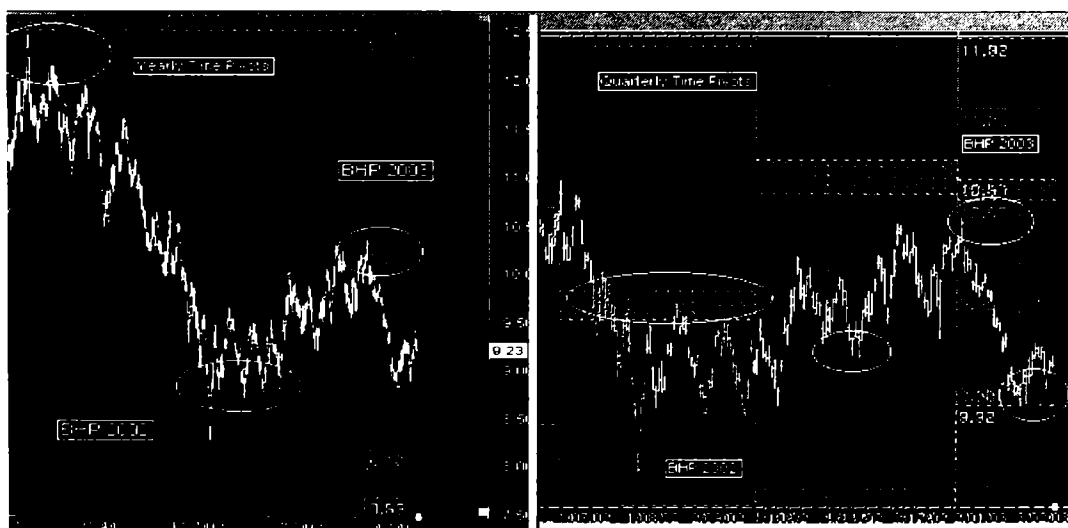
When we have a look at Figure 4 once again and CBA we begin to notice that once Price moves towards the .618 of the yearly range the Risk of holding is increased. When we fast-forward to 2003-4 we can see the same pattern (figure 11). The lows in 2003 followed the lows in our market in 2003 and the rotation was clearly defined into the 2003 yearly 50% level. We can then see the rally in the New Year of 2004, an open above the new Primary Trend 50% and first reference is the new pivot highs where the RISK of holding any open LONG positions is increased.



**Figure 11. Commonwealth Bank of Australia.**

Now let's take a look at when if Price breaks the extreme of the TIME ranges in question. I mentioned there is a possibility of price remaining outside the extreme until the timeframe ends and the new one begins. This is important when understanding how the market can be affected by TIME and the relationship of the dynamic support and resistance. We have firstly identified the Primary Trend; the next cycle in the market is based on the Quarterly timeframe (3-month cycles).

We can visualise trading opportunities through the use of Time. In Figure 12 we have a large cap trading stock (BHP) and the yearly Time Pivots represent the 'risk-reward' in any trading decision. We can see in the chart on the left the large distribution around the yearly 50% level in 2002, but what decides this area of distribution?



**Figure 12.**

We can see in the chart on the right price is actually trading below the extreme lows of the Quarterly Time Pivot, once this floor was broken it can become a 'resistance' zone for the remainder of the Quarter. Within this 'timeframe', any price action around the lows of this Floor represented a resistance zone that some traders can use to discretionally as shorting opportunities.

However the start of the following Quarter (1/10/2002), Time actually allows Price too move freely and higher. The resistance has dynamically moved and in this case disappeared, and the new 50% level for the Quarterly actually becomes a support zone as it moved higher towards the new quarterly highs. Another example similar to AMP I mentioned earlier.

We can see in the same chart on the right (figure 12) Price moved towards the higher Quarter Time ranges and the risk-reward on longs became increased at this point in Time for two reasons. Firstly it can reverse back into towards the new quarterly 50% if no breakout is confirmed, however we begin a new Primary Cycle. We can see that once the New Year Time Pivots began at the start of 2003 price was already at the Yearly central point of the Primary trend (10.29). Two distinct levels of Risk and we can the stock following a period of weakness towards the new 50% level of the quarterly Time (9.75), then confirming another break on the downside and falling back towards the new Quarter Pivot lows where the 'selling' risk-reward diminished once again and found some support around the .618 of the Quarter (8.82).

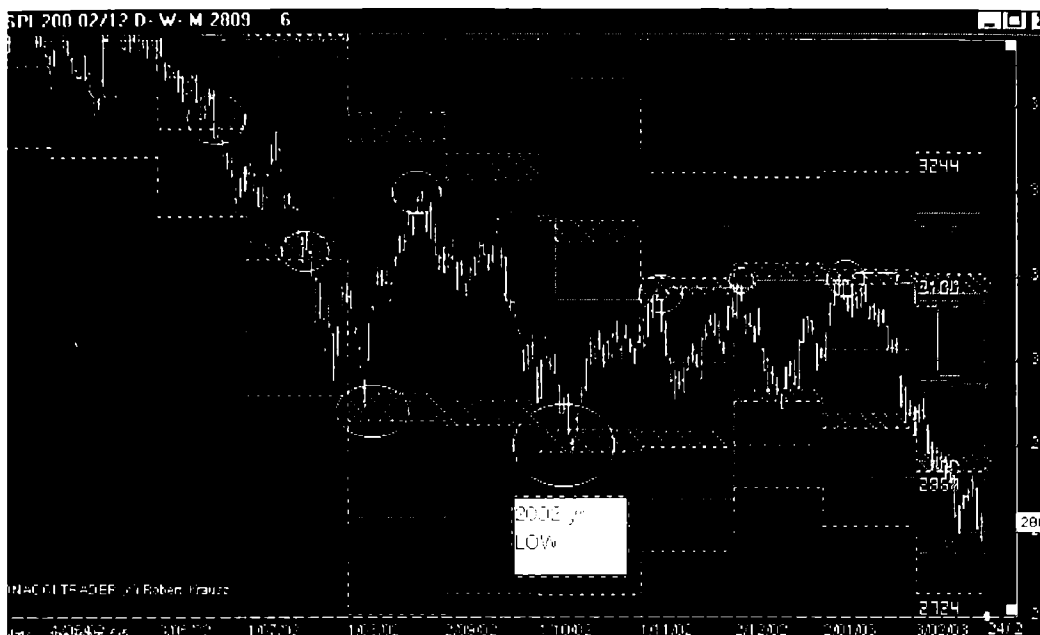
Figure 12 once again highlights the Primary trend and the secondary waves within this primary trend but more importantly it also identifies our risk reward, there is no point looking to 'short' the stock once the Quarterly pivot lows are reached unless they break, then these lows can provide the resistance level for traders to continue to short the stock.

## Monthly Time.

Figure 13 shows the daily chart of the Australian stock market in 2002 and is a continuation from Figure 1 at the start of this chapter. The chart now shows the monthly Time Pivots, we use the same generic calculation to define these levels. It illustrates market structure between the highs and lows of the monthly range and how price moves in waves within this timeframe as it follows the market structure of the higher timeframes. As I mentioned earlier...

*"But as quickly as they look like breaking they rotate back into the centre of the range because the higher time frame becomes resistance and/or support. This is the trap that in-experience traders continually find themselves facing, as the adage goes, the public are the ones 'always buying the tops and selling the bottoms'."*





**Figure 13.**

The methodology of trading Time is, always know where the higher 'Time' Pivots are located and where the position of the 50% level is. Once a new timeframe begins our methodology follows the exact same sequence; trade from the 50% towards the outer ratios and/or from the outer ranges back towards the 50%. The monthly timeframe defines the lesser cycles within the secondary trend.

Trading is about understanding the structure of the market in all levels of TIME and where each piece of the puzzle fits for PRICE forecasting to be highly accurate.

*"Wave analysis based on a series of waves and counts developed by Elliot and DOW are primary examples of cycles within the market place. Dow Cycle; the three basic movements in the market are defined by, the Primary trend, the Secondary Swing in the opposite direction and the Minor Trends, or the day-to-day fluctuations within the Secondary Trend"*

However my problem with wave-analysis is that it is curve-fitted after the event and is usually defined after the retrace of price from the peak or trough. Now using pivots we have a visual where this might take place as seen above, something wave and geometry traders don't have the luxury of until after the event takes place.

This is an edit post from Reefcap (reefcap.com/ubb/Forum1/HTML/001196.html), before the open of the trading day, 11/10/2002.

**FrankD**  
Member

Posted 11-10-2002 08:41 AM

SPI quarterly pivot lows are 2890 (.618)  
the low yesterday was 2889

Now what I'm looking for is a close above 2961 and we might be in for a rally that could retrace .618 of the entire range that take the SPI back up to 3081.

**A move up to 3081 is how I'm treating this market NOW!**

You wont be hearing "dead cat" bounce from me.

Figure 14 shows what occurred after the morning posts. #4, the market bottomed out at the .618 of the dynamic range on 10/10/2002 and reversed towards the point in the market I had already forecasted hitting a high of 3084, #5 then subsequently the market was sold off.

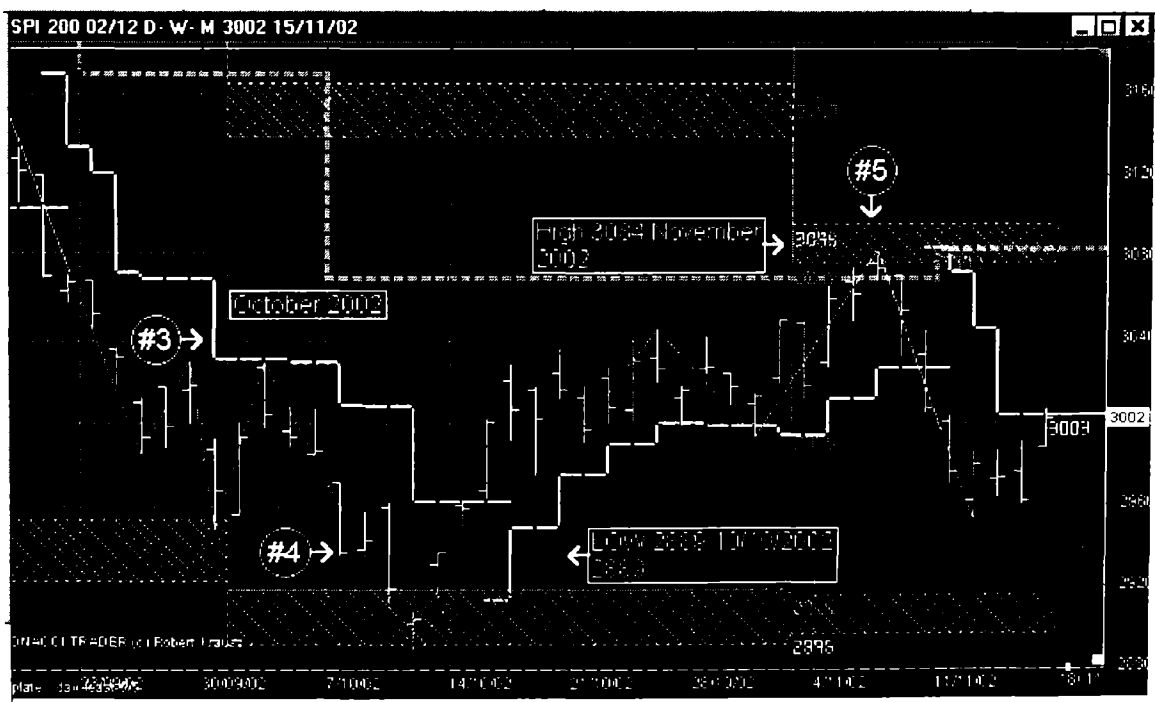


Figure 14.

I can say that this 'market call' in 2002 was when it all began and when others began to take an interest in my calls on the market. It was easy to 'call' because of the many variables lining up and I didn't have to wait for the 3-day highs to be taken out.

I talk a lot about 3-period cycles and dynamics based on the multiple timeframes I've mentioned. Three period cycles describe the movement of price action based on 3-days, 3-weeks and 3-months. This is a Gann principle and I think most traders should take notice of this. Whatever you think about Gann, the 'myth' or his trading methodology I want you to be able to have an open mind until you complete this book. I'll go into more detail about Gann and the dynamic 3-period cycles in the next two chapters, but as I deconstruct fibonacci, Market profile and Wave analysis into a more dynamic model, I will do the same with Gann and slowly morph them all into the Analytical Market Model that I have developed, and that you will learn.

*"As 'Time' is the only know factor in the market that can be know in advance, and we subscribe to the belief time is forecastable, then its is acceptable to believe that what ever happens in the past will somehow affect events in the present and which in turn affect events in the future. "*

### **Weekly Time.**

Depending on the type of trade you are, I recommend always using the two higher timeframes above what you trade. If you are an intra-day trader then it is imperative to use the daily timeframe and weekly timeframe as a minimum. The same math and price calculation is used for the weekly timeframe, and the same principles govern this timeframe like any other. Break or rotate and when you look at the DOW and S&P you will see how the weekly extremes play an important role. This is the process of rotation and extension based on TIME and Price; the constant ebb and flow and the re-occurring patterns are continually appearing when we look at the dynamic nature of the markets that exist today.

### **Price or Time?**

Price analysis is based on the theory that history repeats itself. Time on the other hand, equates to value. The amount of Time that Price spends at a certain level defines value within that cycle. To Gann, Price should equal Time as the markets move in a natural progression. To Peter Steildmayer, Price multiplied by Time equals Value.

That's fine in understanding the relationship between Price and Time for it too equal Value, but how do we define Risk-Reward on any given set-up. Any methodology that uses Price to determine the profit-objective would use the past data of the cycle and project it forward. The universal method would be to project the move of Price using the Fibonacci sequence of ratios.

Figure 15 shows the price action of past data with the Price projection based on the extended Fibonacci ratios. The 'reward' is defined by the profit projection of past data, determined by PRICE. 'Risk' is defined by the dollar value of the trade and money management rules, again determined by PRICE. Looking at the Price action, there is strong argument that a Long position Buy trade is a high probability trade.

So what is the probability that this trade will succeed? Statistically, the only answer could be 50%, if there are only two possible scenarios that could occur, then the answer could be only 50%, or as most traders would say, 'we don't know if this trade will succeed or not'. So the Risk-Reward scenario is solely determine by Price and individual money management rules.



Figure 15.

*What happens if we determine Risk-Reward with TIME instead of Price?*

Figure 16 shows the same chart with the Risk-Reward based on TIME. The probable 'reward' of past price action based on extended wave theory has dramatically decreased. The Risk has dramatically increased. In the previous example (figure 15.) a trader taking a 'long' position would be stopped out based on Price. A trader who determines his Risk-reward based on TIME would determine the Risk but he would also determine Reward, so that a Short trade within the Timeframe (monthly) becomes a High Probable trade. The failure of the 50% level has become a high Probable short trade and also determines a High Probable Reward target.



Figure 16.

The purpose behind deciphering the market's timing also relates to profits. *Who cares what the price level is, as long as you know what's going to be the turning point in the forecastable Time.* The methodology of determining Risk-Reward should then only be based on the Time of past data instead of the Price of past data.

The daily TIME pivots are also important whether trading the medium term of a 3-day cycle or only trading the intra-day timeframe. Figure 17 shows the simple method where price fails at the weekly pivot extremes and how the 50% of the daily range can follow the same principle of moving from the balance point to the extreme of the range. If the range breaks then it becomes resistance within the Timeframe. You will also notice that the start of the new week and the new 50% level provides the support for price to move higher, these types of moves occur frequently and the weekly Time range along with the central point is a must for any short-term swing trader.

If we can understand the daily range and how it fits into the higher cycle of the 3 day range and the Weekly TIME, then it becomes a lot clearer in defining Profit objectives. We can see in the last daily TIME pivot how the daily high, coincides with the weekly 50% to add to the confirmation that Price will move upwards from 24/2/2003.

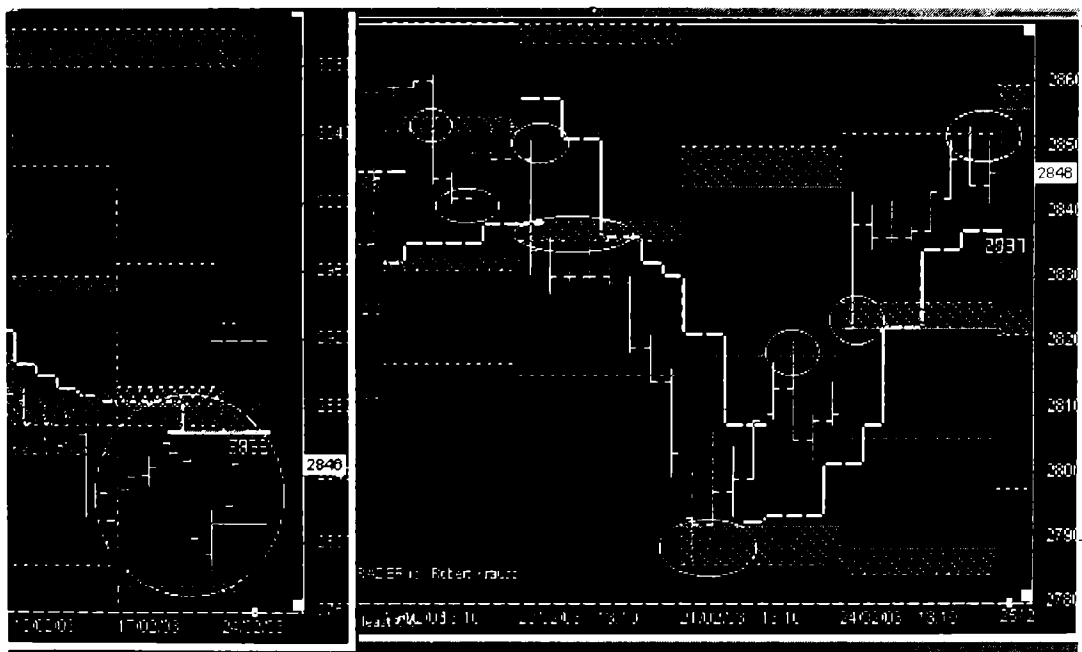


Figure 17.

Fibonacci ratios are just 'Price' levels that don't confirm any value what's so ever. That is why traders fail to understand what these ratios mean. Normally (assuming) a trader places a trade at a .618 ratio of a range, then the trader doesn't know if the trade will fail or succeed. Statistically he has no edge to trading than someone else entering randomly.

Value can only be defined by TIME, Time and Price equals Value. So if price has distributed at this .618 area before, then that fib ratio will become more valid as a buy area than before. The point I stress is, TIME has a greater influence over Value than Price alone.

So a trader needs to work out. Do I trade at fixed Price based on sitting in the line and no matter what 'systematically' taking the trade with tight stops?

Or, Do I wait for Price to determine the pattern over TIME to take the trade.

It opens a can of worms because each trader plays a different role in the market. A short term trader (intra-day) will base a lot of his decisions based on selling against all major trends back to a point of past Value (i.e. Market Profile), whilst another trader might only trade breakouts/breakdowns as shown on days 20/2/2003 and 24/2/2003 in figure 17.

My argument will always be, Price is open to interpretation, but Value can only be determined by TIME, and TIME has more relevance than Price alone.

Price isn't a good predictor of the Future, because Price doesn't determine Value, only TIME has the ability to provide the necessary information for probable future moves with a high degree of accuracy using levels in the market that has been determined by Range of TIME and simple math.

## **In Conclusion:**

Each Timeframe will play a dynamic role in the market. If you are a day trader your focus will always be on the two higher timeframes. If you are a position trader then the larger Timeframes is your focus because of the model of expectation of price moving from the higher timeframe extremes back towards the central points. We have clearly defined Models based on RISK.

Personally I don't want you to get bogged down on this first chapter, I'm only trying to help each individual understand that each level of Time can play a defining role and how each level can define Market Risk. Over the next few chapters the real story of AMT will begin to shine through.

The next chapter focus is on market Cycles and how we define any trend and how we can trade the start of any trend.

## Chapter 2.

### The 3-period Cycles of the Market

The Trend is your Friend! This old trading axiom would have to be one of the most quoted statements in trying to describe any trading methodology. Most trading methodologies would follow the same line, trade the 'major trend', if it were *up*, then buying the dips would be the surest way of making profits. The simplest way to describe any trend would be defined by any series of higher highs and higher lows for an UP trend and visa-versa for a Down Trend, the longer the time frame the more significant the Trend. But most markets don't always trend, there will always be prolong periods of markets consolidating and rotating back to some central point in TIME. The CYCLES of any market must be understood for any trader to maximise the potential that exists in the market structure.

Wave analysis based on a series of waves and counts developed by Elliot and DOW are primary examples of cycles within the market place. Dow Cycle; the three basic movements in the market are defined by, the Primary trend, the Secondary Swing in the opposite direction and the Minor Trends, or the day-to-day fluctuations within the Secondary Trend.

Cycles are also built on the observed phenomena that events have a tendency to repeat themselves. Gann, another famous trader and structural analyst believed that precise mathematical patterns governed everything and integral to his trading system again are the Fibonacci numbers and natural law.

**Analytical Market Trading defines cycles using the past 3 periods of Time.**

Time is defined by each generic Time period that we are already familiar with; Day, Week, Month, Quarter and Year.

**The cycles are determined by the previous 2 continuous higher lows or the 2 previous continuous lower highs.** The late **Robert Krausz** who featured in *The Market Wizards* by Jack D Schwager has developed this technique and it clearly defines the strength of the trend within each timeframe. He calls it the 'Dynamic-Trio'.

The CYCLES of any market must be understood for any trader to maximise the potential that exists in the market structure. Also, each market has its own rhythm; the more time you spend trading a market, the more you'll notice the moves and cycles that exist within the market structure and the predictability of the patterns continually reoccurring. This article features the Australian Stock Index (XJO) and especially the Australian Index Futures (SPI). Because our futures market is now run by S&P (US) the correlation between the two are extremely close.

I use ‘**the optimum 3-period dynamic cycle**’, because I believe these cycles are more valid in today’s market than any other when used in close calibration with all Time periods. We begin this chapter describing in detail the relationship between Time, Cycles and Market Structure analysis of the 3-period methodology of Analytical Market Theory.

The relationship of my methodology began with work of **Robert Krausz** (Market Wizards) and him defining a 3-day cycle based on Gann’s definition. Robert’s work allowed me to have a better understanding and defining the relationship between TIME and Price whilst trading any market, and is tremendous in simplifying any trend and change of trend in the opposite direction. It doesn’t matter the Time frame used, whether Intra-day or higher, the same recurring patterns allow trader’s to define the Market structure and Market Risk associated with the current price action. When we combine the 3-period Cycle and TIME, it will take the guesswork out of what the market will do and interpretation of price will become irrelevant.

### **The 3-period cycle:**

Gann’s work was traced back to a piece of paper he had written on, describing his 3-day cycle. Gann’s 3-day cycle was always defined by the previous 2 days of trading; a cycle was defined by two consecutive highs, or 2 consecutive lows. Whereas any other method would normally define a 3 day cycle, by the previous 3 trading days. The cycle would continue until the previous low or high was taken out. Personally I would need to see the time period close outside the range to confirm the change of trend.

Figure 18 shows the 3-day (period) trend defined by the 2 continuous lower highs and 2 continuous higher lows (insides bar do not count). It gives clear trend direction for trading and shows each swing point and highlights the change of trend when the previous high or low is taken out. The Trend changes once a close above/below the previous cycle occurs, meaning, if the cycle is a sell the trend remains until the opposite occurs and closes above those trailing 3-day highs.

The closest indicator to the 3-period cycles is using the moving average of the highs and lows of the past 5 bars. So if the day closes below the moving average of the 5-day lows then the trader can use the M/A of the 5-day highs as the trend guide. Use the same method for the weekly and monthly 5-period ranges.

Figure 19 shows the exact same price action as figure 18, but it shows how important that the trailing 3-day cycle highs and lows play. You can see that whenever price tests the extreme of this 3 day range, it provides clear understanding that Price has a high probability that it will fail in moving any further. The trailing white line shows the 3-day cycle highs and lows. A close above or below these extremes will swing the 3-day cycle around. So we can see in Figure 18, that whenever there was a swing in the 3-day trend, the swing failed at the 3-day trailing Zone as shown in Figure 19.



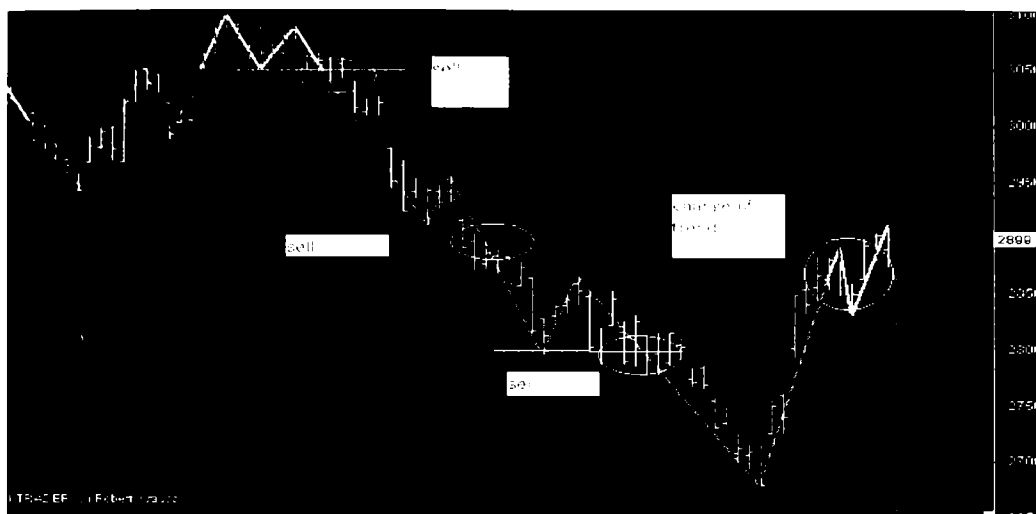


Figure 18.

This 3-period cycle is the exact same as the 3 period Swing as shown above, the difference is that, the 3-period cycle is dynamic and moves along showing the trailing two higher highs or the two lower lows. These extremes of the range based on this technique are valid areas of support and resistance as it moves along within the Primary, Secondary and Intermediate Trends that DOW and Elliot so eloquently described, and what the AMT model clearly defines!

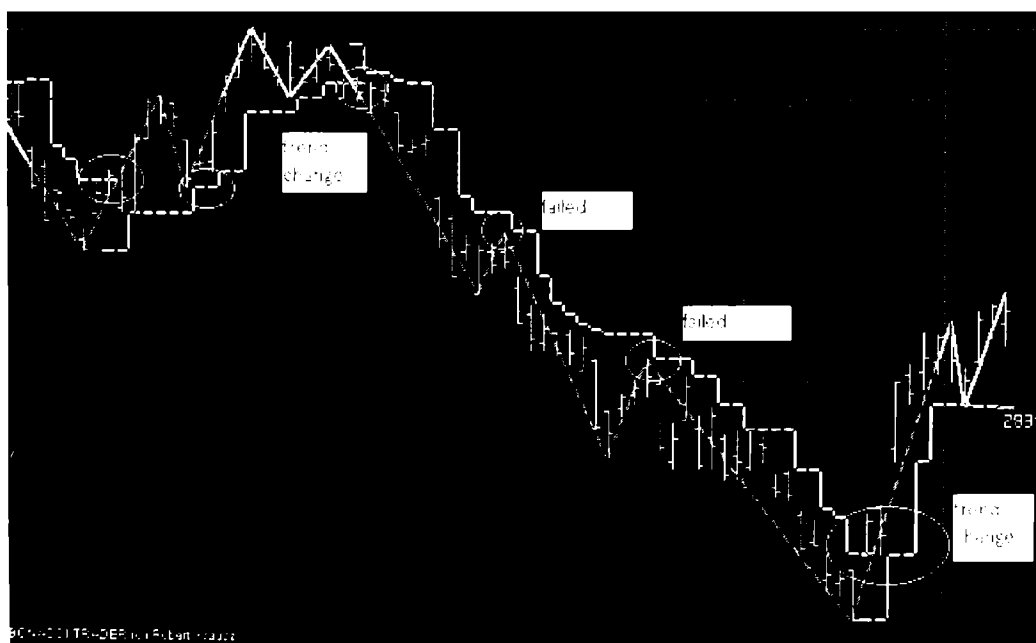
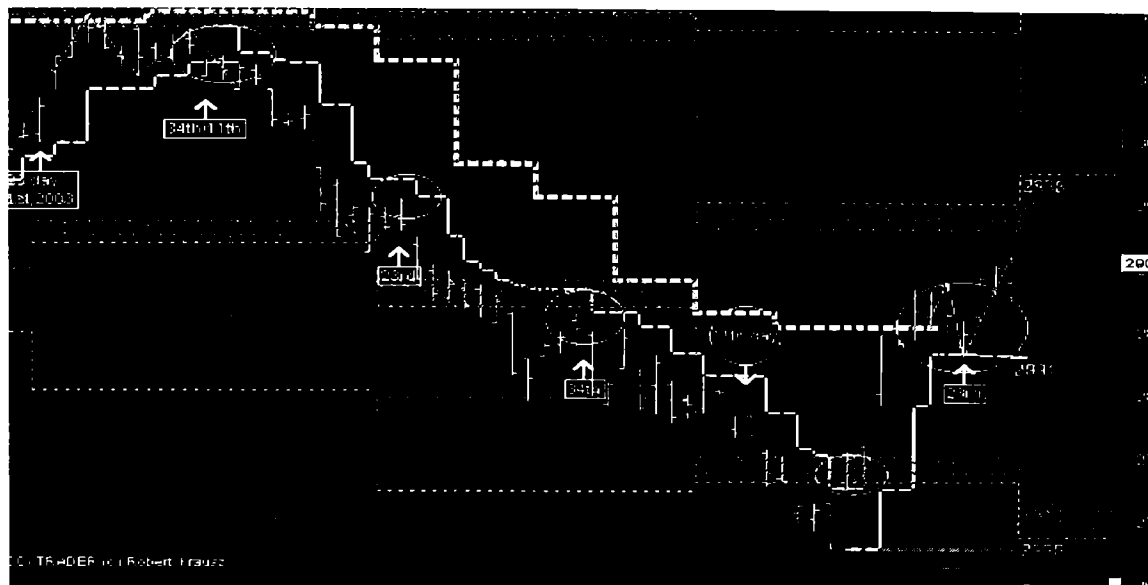


Figure 19.

We can also see in Figure 13 on page 33, that using the same method using the 3-week cycle extreme becomes a valid reference point of any resistance on the larger Trend.

We can see in Figure 20, that on the 14/3/2003 (bottom of the chart) the break of the 3-day highs and the changed the trend, once price moved above these highs it rallied back to the higher Time 50% (monthly) and also the 3-week cycle high.



**Figure 20.**

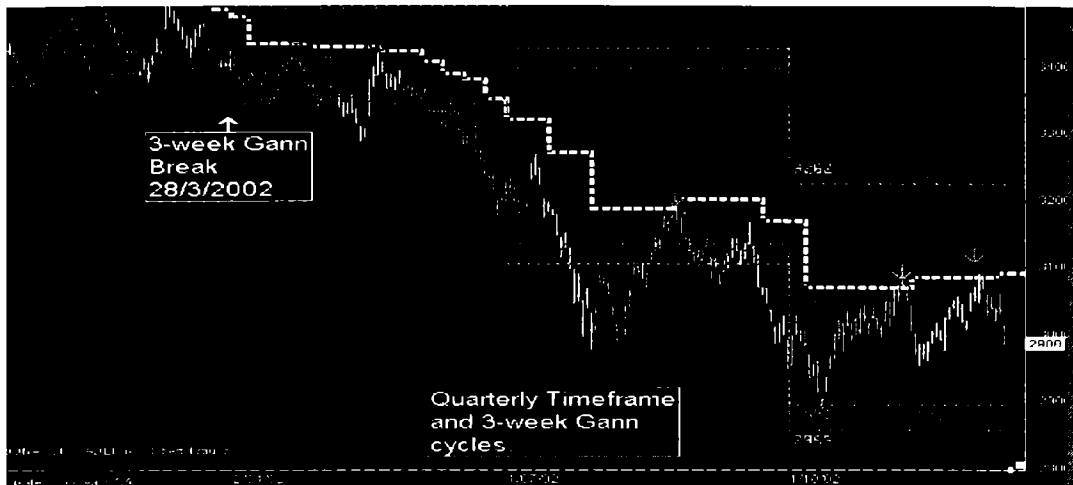
You will see throughout this book how important these 3-period cycles are in our market today. These 3-period cycles clearly define the trends and cycles, whether they are just corrective or actually a 'new' trend, which is about to develop in the opposite direction. It helps define Market Risk for all traders.

**We use the 3-period cycle on everything we trade. It is a simple tool of using the past 2 continuous bars for defining the strength of any trend. It is an 'Observed Phenomena' that occurs in all markets whether it is stocks or derivatives.**

The problem a lot of Elliot-Wave analysts find is that, Price becomes open to interpretation because the waves are only known after the fact and can be confusing for many traders. You will find a group of wave traders all with different wave structures, in my opinion the analysis is not generic for all traders and usually curved fitted after the event when defining the Market Structure and Price action of the stock or derivative traded. The AMT model is generic to all and easy to identified.

The AMT models begins with the understanding that price is moving in the direction of the primary trend (Yearly defined by TIME) then a 'model of expectation' is clearly defined by using the 3-period cycles. The 3-period weekly cycle is important for short term traders, whether medium term traders holding positions over a couple of days or even for the intra-day trader as trading with the trend will always provide the most reward. This 3-week cycle will always define the intermediate trend and is universal in all stocks or derivatives traded.

Figure 21 illustrates how important the 3-week cycles are, we can see that the close below on 28<sup>th</sup> March 2002 had swung the entire weekly cycle around, and over the rest of the year (primary) we can see all the points in the market where price had failed, we had a valid area that would play a dynamic resistance role as the market makes its way towards the yearly lows.



**Figure 21.**

I sent out this email on Friday 21<sup>st</sup> March 2003

**Date:** Fri Mar 21, 2003 5:46 pm

**Subject:** SPI, the bigger Picture.

*Any time over the course of the year since, The SPI 'HASNOT' been able to spend over 1 day above the trailing highs. Every time it broke those highs (3 week) then next day the market continued lower. It gave us a clear signal to short the market on the larger picture.*

*Now this trailing 3-week high was 2853. Yesterday it broke the high and closed above it. This swings the entire weekly trend around.*

***With 3131 and the yearly Pivot 50% moving into Mid-MAY.***

***\*\*edited post.\*\****

That was my edited post to my subscribers describing last years price action regarding the 3-week cycle, I made the reference that price had continually failed at this level as the market made its way lower throughout 2002 and continued lower in 2003, as shown in Figure 21. I also made reference that price on this day had closed above the 3-week cycle highs to swing the weekly cycle around.

***“With 3131 and the yearly Pivot 50% moving into Mid-MAY”.***

Figure 22 shows what occurred after this post as price made its way towards the yearly 50% level of 3130. The important thing we notice once again are the two areas of Price reversing from the ‘new’ BUY cycle of the 3-week cycle lows as price continues on the market path upward towards the highest central point (primary). An accurate forecast some months earlier and over 400 points. The only problem with my expectation was that it reached 3131 in June and not in May...oops.

The same thing occurred in 2003 as in early 2002 but in reverse, the failure of the market to remain more than one day outside the 3-week cycle zone gave any trader a clear zone to ‘short’ from in 2002. This same price pattern has given any trader the same zone to go ‘long’ and Buy the market, as shown in Figure 22 towards the yearly 50% level (balance point  $H+L+C/3$ ).

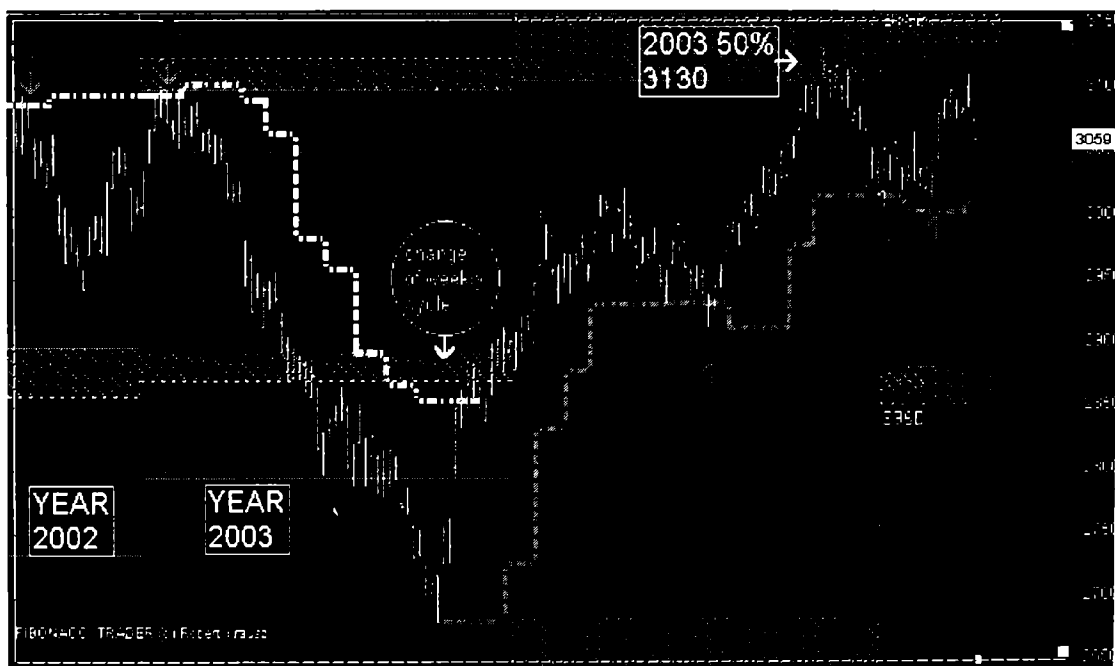


Figure 22.

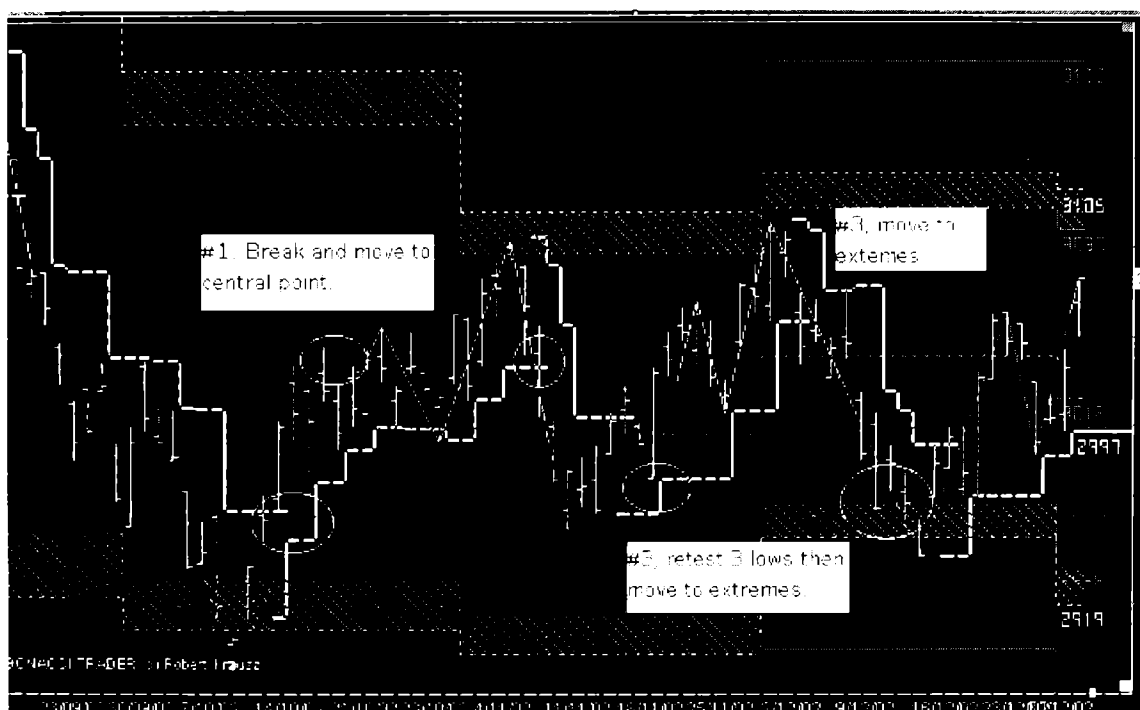
## **Change of the 3-period cycle:**

There are 2 possible scenarios whenever a change of trend occurs.

1. It can continue to move after the break back towards a Higher Times frame ‘central point’ or Pivot extreme as seen in Figure 20.
2. It can go into a 2-day stall above/below the 3-day break and on the 3<sup>rd</sup> bar continue or reverse the change of trend towards the extreme. Normally the first day after the change of trend price will swing back towards the 3-day break as a target and stall.

Those two scenarios are the only two things that can occur; the only thing at this point we don't really know is which one has the highest probable outcome. In later chapters based on Statistical and Standard Deviation trading I will outline which of the two has the highest probable outcome, but until then we filter it out by using the higher timeframes. So if it occurs in the daily time frame (3-period daily cycle), we use the weekly TIME PIVOTS as a filter, and if it occurs intra-day, then we use the Daily PIVOTS as the filter. I want to remind you that these 3-period cycles can be used on any timeframe, including intra-day timeframes of any length, as seen in figure 17 on page 37.

All traders will be looking at the exact same price action, no ifs or buts. It is generic to all, however it's how each trader uses the information to trade that will be the only difference in the outcome, and this is because everyone operates under a different set of rules, systems and trading plans.



**Figure 23.**

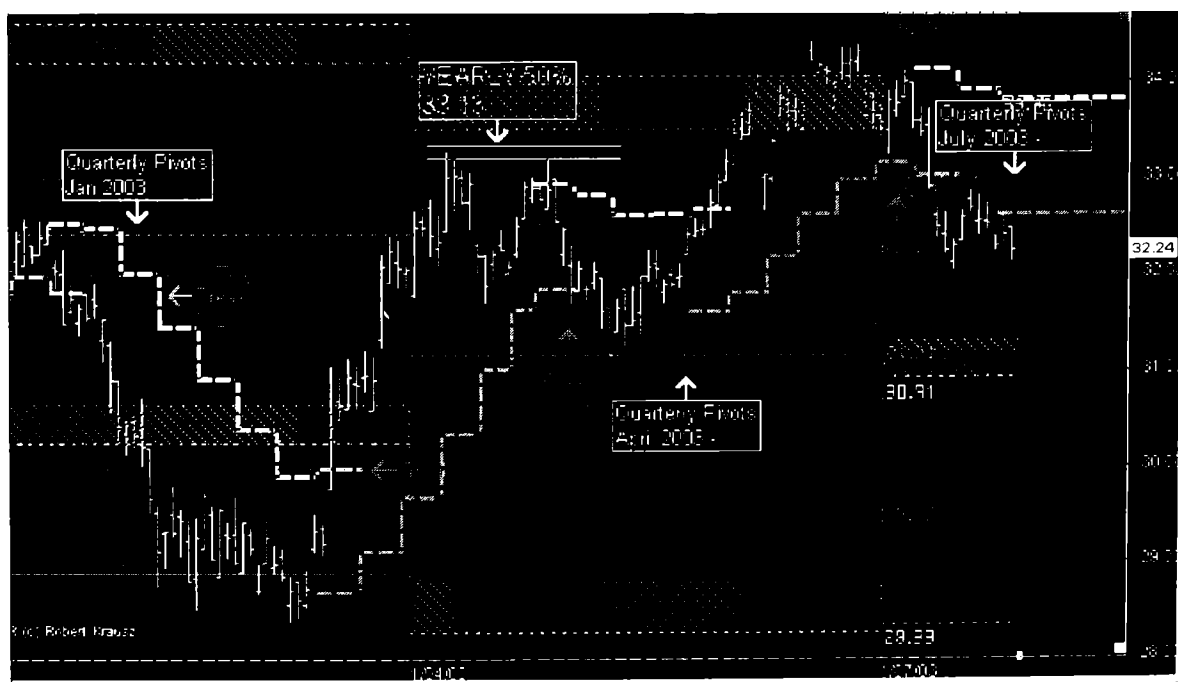
Figure 23 shows both scenarios; a break and change of trend moving back to the higher timeframe central point, and the 2-day stall before the trend continues in the direction of the cycle change. If the change occurs around the central point (50%) of the higher timeframe (monthly) then price will try and move towards the extremes of the monthly range.

As a Trader, whether you are an intra-day trader, medium or position trader, we must know how the cycles are performing. We must also realise that the close of any period is one of the most important things we must consider when analysing the market structure.

The close of any Time Period, whether it is daily, weekly or monthly, will set up the ranges and central rotation levels (50%) for the next timeframe, and the 3-period Gann set-ups will confirm the medium trend.

As Traders we must make a conclusion that there is a high probability that each sequence will have a certain path to travel, either moving towards the Higher timeframe central point (50%) and/or Time Pivot extremes. We can see that by using the AMT methodology alone without the use of any Fibonacci-expansion analysis techniques taught by others we are able too determine and define with clarity our Profit Objectives, the Trend, the Risk, and the Market structure of any stock or derivative traded.

As a Trader, knowing what the two higher timeframe pivots are doing is a must! Even an intra-day trader, I would suggest that the monthly Time Frame is the minimum requirement when it comes to trading. We have seen, that each monthly Timeframe and 3-day cycle provides clear trading opportunities for any trader, whether they are an intra-day or medium term position trader. For any position trader his or her focus would be to look for major swings using the Quarterly timeframes along with the 3-monthly cycles. These larger cycles will be the driving force behind the primary and secondary trends of the stock or derivative analysed and traded.



**Figure 24.**

Figure 24 illustrates the cycles and rhythms of National Australia Bank. When we have a closer look at the weekly 3-period cycle along with the Quarterly Time ranges, we can see how important the dynamic 50% level of this timeframe is, as this will define our secondary trend and our dynamic support and resistance of Price in advance.

I will highlight in the Equities chapter near the end of the book the tendencies and unique rhythms and cycles of individual stocks. The AMT methodology is generic for all stocks and derivatives traded but they still have their own individual rhythms, and there is a tendency for them to act in a very similar way as the market dynamic moves forward.

*“Traders need to have a better understanding of why TIME is the most important component of today’s market, because Time is the only thing that we are able to forecast, once we are able to comprehend this then each trader will begin observing the statistical phenomena of the same patterns occurring over and over again.”*

## **Weekly Pivots and 3-day Cycles.**

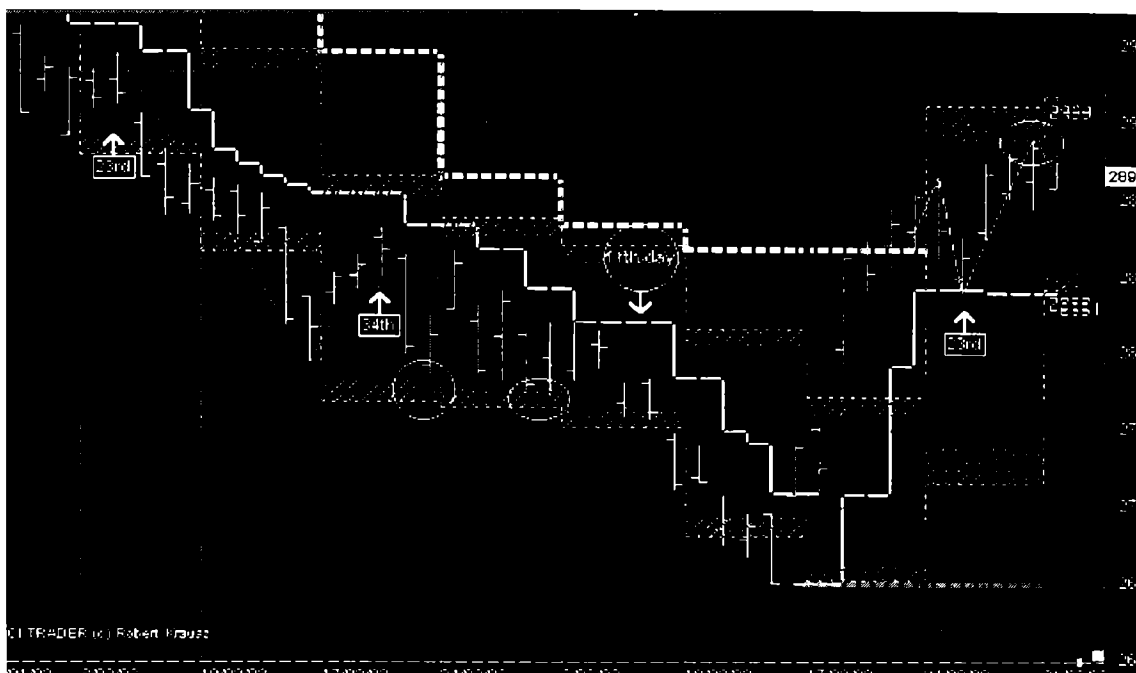
A monthly cycle consists of approx 20 trading days.

*“I was inspired and influenced by the book *Reminiscences of a Stock operator* and also by Richard Donchian’s Five and twenty-day moving average crossover system and his weekly rule system.”* Ed Seykota, Market Wizards.

*The Weekly Time cycle* consists of 5 trading days and as seen with the monthly cycle, it provides a clear understanding how the weekly trend is performing and it also provides clear short-term profit objectives when trading the weekly cycle. Again, the 3-day cycle will keep you in the trend, but the rotation and extension in this 5-day period will be greatly influenced by the weekly cycle and Time Pivots. The close of the weekly Time frame is as important as any other Timeframe. Even though the Monthly Pivot is the driving force behind any 20 days of trading, the weekly provides the ‘steps’ after the monthly profit objectives are reached.

At the start of any weekly Timeframe on Monday, Price will follow the normal cycle of rotation and extension, towards new weekly 50% level and the weekly extremes. There is a tendency in early week that Price will try and rotate towards the new 50% level of the weekly timeframe and the 3-day support/resistance zones. The outer extremes of the weekly zones will have a higher probability of being reached after a swing and bounce from the trailing 3-day cycle extremes.

If the weekly pivot extremes are broken and the daily bar closes outside, there is a high probability that price will remain outside the range for the rest of the trading week. It is not a forgone conclusion but it is an expectation we make on this timeframe and all other timeframes, as I will highlight throughout the book.



**Figure 25.**

Figure 25 shows the outer references as targets for price to reach within the weekly structure. We can see how early in the week price will try and gravitate towards the weekly 50% level, but as long as the 3-day cycle level allows it to.

A medium-term trader, the best scenario would be to wait and take a position closer to the 3-day cycle area and look to trade towards the outer extreme of the weekly Pivot ranges. Throughout the book this type of trading will show you how to minimise the risk and maximise the gain using the weekly pivots.

Figure 26 shows an example of weekly dynamics and how crucial the role they play for any trader along the 3-day cycles. At the end of the trading week price closed at 2881. Using our mathematical equation of the past trading week  $(H+L+C/3)$  we can see the weekly has a high ratio of 2909 for the next week and also a 50% level of 2830. We have a high probability scenario that price will try and rotate towards the new weekly 50% and as far as the 3-day cycle low of 2832 in early trading as part of our rotation towards 'new' central points of Time. If price does move higher on the 3<sup>rd</sup> day after any 2-day stall/rotation we should have an expectation that price will try and move towards the weekly dynamic high of 2909. Using the past we project the future.



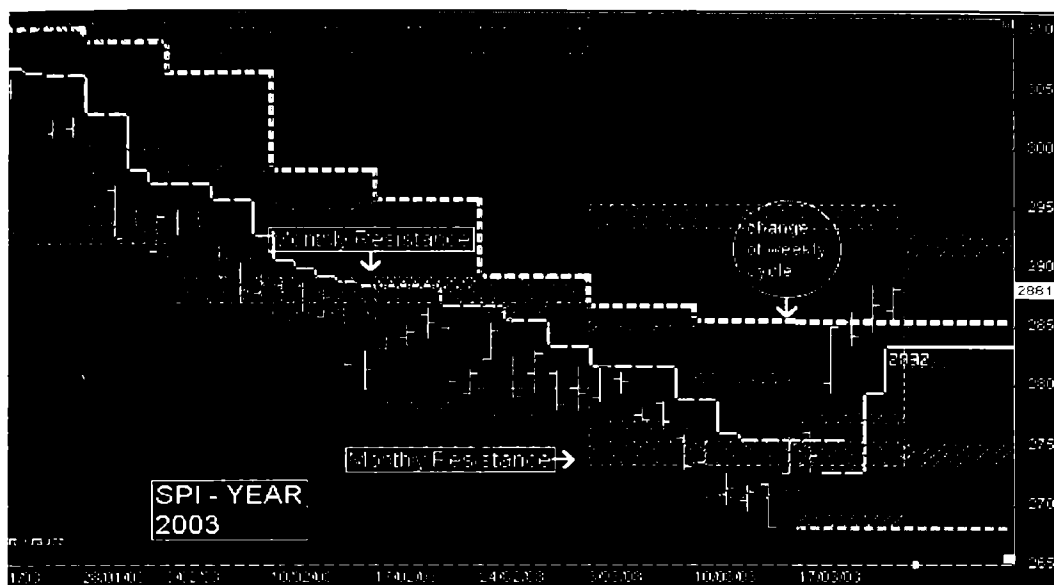


Figure 26.

*"The problem with the theory (market profile) was the understanding of the market for the day, the market didn't consist on one days trading; it consists of a number of days. Today's results are poor predictors of tomorrow's action. There was a missing link."* And that missing link is the higher timeframes.

Figure 27 shows how we filter out any move using the same principle with the Daily Time Pivots. We follow the same principle, we look for price to move towards the daily 50% level and we use the daily pivot extremes as areas of interest, that being our support and resistance.

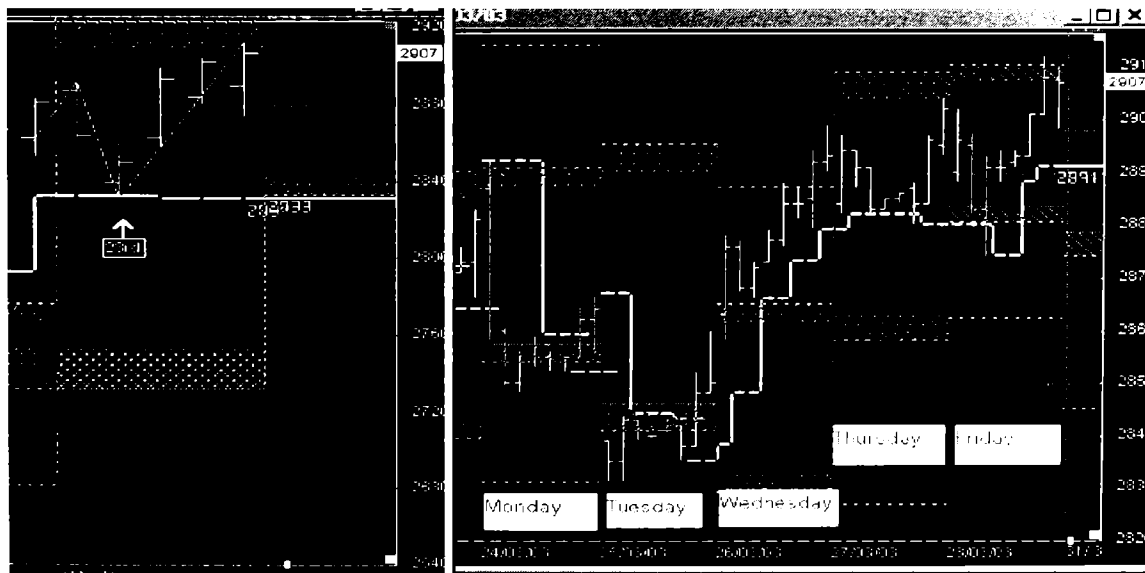


Figure 27.

Whether being a medium term trader or a short term trader trading in minutes, if we understand the path of Price over time and filter it out with higher timeframes then 'our models of expectation' should provide the necessary data to swing the odds in our favour. We can see on Friday and the end of the week price has reach 2909. At the close of the trading week we once again have new levels and another path to follow for the following week. *(Note: this scenario would not apply if the 3-day lows had broken).*

As day traders who were trading this scenario, we would use the same methodology of the higher weekly swing upwards but we would need to use the daily pivot ranges as a filter along with any intra-day 3-period cycle. I prefer to use an 8<sup>th</sup> of the range to determine what intra-day timeframe I use. Basically I take the time between open and close of the trading day and divide the time by 8, then use this. However no matter what intra-day timeframe you use, Price will follow the Market structure of the higher timeframes, so in reality it doesn't matter what timeframe you use for intra-day trading.

## Dynamic-Multiple-Timeframes.

Since the beginning of this book I have described the importance of TIME in determining the dynamics (pivots) and the 3-period cycles for in any trading analysis and trading opportunity. The AMT methodology is trading any 'Window of Opportunity' towards the central point of Time or towards the extremes of 'Time' within the market structure of all higher timeframes.

We filter out all the moves with the 3-period cycles because this alerts us to any cycle change, and it also clearly defines the strength of the trend. Now there are a lot of different types of traders and each trader fits a different profile, one might trade the trend over a few days whilst another trader might trade just in minutes, but the underlining market structure will always remain the same, if TIME is the only thing that we know is 'dynamic in nature' and when we find a way to calculate Time and then project TIME forward, we should then be able to map out the market path with precise accuracy. How each trader uses this information will be up to the individual, because one might prefer to trade with the trend using the 3-day cycle and hold his or her position, whilst another might prefer only to trade the open of the trading day using the daily ranges as their guide.

If these markets are making precise movements over TIME with high accuracy then each trader can use each dynamic level in the market to their own advantage, knowing well when their odds begin to swing in their favour as price moves from one Time level to the next Time level, and as importantly know when Market Risk is increased when cycles change and extremes of ranges are reached/

The close of the trading period is one of the most important aspects when trading, firstly it sets up our new timeframe for the following time period, and lastly it provides the necessary information of the market path using the 3-period cycles as a guide.

I'm going to continue with the sequence of events and the close of the trading week at 2907 (figure 27). This close was on the 28/3/2003; we need too acknowledge two higher timeframes have now ended, the weekly and monthly, so from next week we have two new higher timeframes that will play a major role in defining the dynamics and structure of the market.

Figure 28 takes a close look at the close of the trading month; we can see that this close has projected a new high of 2947 for the new month. We can again see the same sequence of events taking place, a rotation back towards the 3-day cycle zone and weekly central point at the beginning of the week and then a 3<sup>rd</sup> day move upwards towards the weekly highs, and then a rally on Friday towards the new monthly high of 2947.

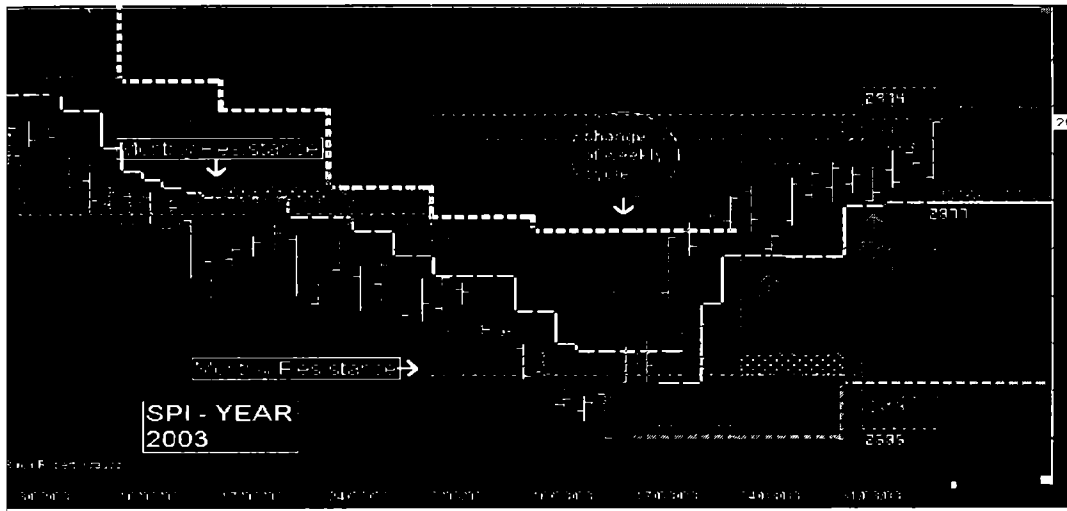


Figure 28.

Even though the weekly extremes provided some resistance for two days, whilst price remains in a bullish cycle based on the 3-period cycles, the market is always trying to move towards the extremes of the higher timeframes.

## In Conclusion.

After reading the two previous chapters we begin to understand the relevance of developing a simple technique of defining the strength of the trend. This cycle will then have a tendency of moving towards the extremes or the central zones of Time. Each zone of time will be dynamic and never the same as the previous timeframe.

We now begin to see how the AMT model is starting to evolve. There is nothing static about the methodology of AMT and over the following chapters we will follow the market chronologically from 2003 until the end of 2005 and how the market structure becomes clearly defined and how the repetitive patterns continually appear over and over again.

The next Chapter on Market Dynamics is probably the most important in comprehending the relationship of what I have been writing about since the beginning of the book. The puzzle of the markets unravel and the 'When' factor begins to take hold and is clearly defined.

The desire of becoming a systematic and successful trader is revealed, and becomes a closer reality for many.

## Chapter 3.

### 3-Period Dynamic Ranges.

As a short-term intra-day trader my method is basically to sell against all trends, short medium and long, because I always expect Price to rotate back towards a central point from an extreme point of any timeframe range. I also understand that the market rotates within itself whilst the market moves forward as TIME moves forward. This is how we define market dynamics and in my opinion the only way to define market dynamics. Combining the two concepts of extension and rotation of Price over Time, there should always be an opportunity to trade because this provides the Window of Opportunity we are discretionally seeking. Using the mathematical equation  $(H+L+C/3)$  of all higher timeframe ranges we should be able to provide a clear definition for our 'models of expectation' that define Market Trends, Market Cycles and Market Risk.

Lets continue with the same mathematical equation that we use to extend Time forward,  $H+L+C/3$  and once again look at the 3-period cycles. Gann found something unique in the market and these cycles; he found that using the 3-period of Time he was able to define the trend and also provide himself with probable set-ups with any change of cycle and the probability of a change of trend in the opposite direction. These cycles now provided us with the necessary information where 'risk' is and where the best possible entry for us.

*One of the most famous exponents of Time forecasting is Gann and his methodologies. He based his assumption that any one point in Price or Time is a reflection of some important event that had occurred in the past, and correspondingly, any action occurring in the Present will forecast future actions.*

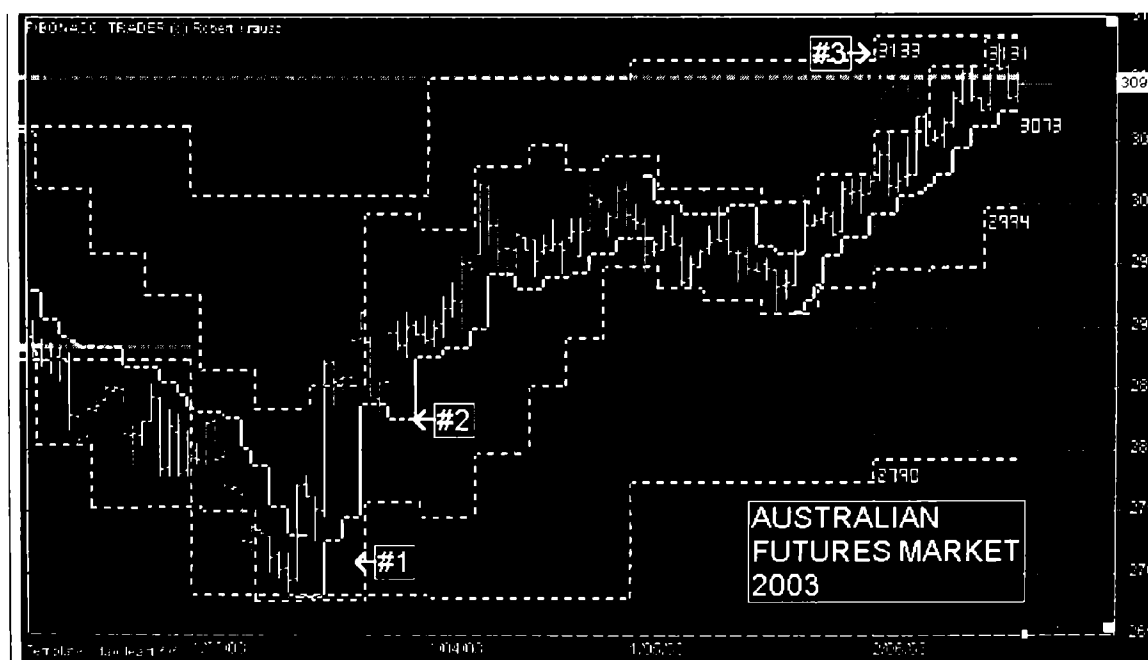
So if I'm right and Gann had found something unique in the number 3, was it possible to extend the same theory and use it to extend the theory of AMT Market dynamics on all higher timeframes. We use the number 3 and TIME periods for finding the unique cycles and market structure for Price to travel over Time.

I wanted to know whether I could use the same mathematical equation on all higher Timeframes so that it would provide the necessary levels in the market that would allow me, and now you to trade from extremes back towards dynamic central points, and from central points towards extremes. When I was back testing the intra-day data for the SPI, I began to notice that there statistical patterns appearing in the market as if price action was continually repeating itself. When I applied my theory over the numerous timeframes I was blown away by what I was seeing. Could our market be so precise in nature?

Over the course of this book I have identified the five Time frames that play an important role in the market structure, and as each timeframe ends we have a new timeframe that will guide us along with the 3-period cycles. It is fine when trading from one level to the next when we hopefully exit the position at our pre-determined profit objectives as per our individual trading rules, however to maximise the potential that exists in the market I personally would also like to find the areas in the market structure where price was exhausted at the extreme and 'when' price was likely to move back to the central zones from these outer levels.

My goal was twofold, trade with the trend and trade against all trends. Sounds confusing but hopefully it will become clearer as you continue with this chapter and the rest of the book. The second goal might sound like picking tops and bottoms, a no-no in anyone's language, but the market has moved beyond being driven by human sentiment, and in my opinion a better way when trading intra-day derivatives.

Before I get to intra-day trading I want to go back and look at the bigger picture. Figure 29 shows two channels in step formation, the Yellow channel is based on the monthly timeframe and the Green channels are based on the weekly timeframe, however this time instead of using only one period we use the past three periods. Basically we do the same calculation as before and use  $H+C+L/3$ , and then take the past 3 timeframes and place it over the new 50% balance point. Have a close look at the price action.



**Figure 29.**

Have a close look at the lows of the market on the 13/3/2003 (#1) these lows were 2680.

Figure 29 shows that the 3-month lows were broken in February, for March we had new lows that were projecting price lower towards 2680, once these lows were reached @ 2680 the market reversed and rallied, our confirmation was the 3-day cycle change. When you look at where these 3-month dynamic highs were, it wasn't until June and the Yearly 50% that there was a congestion of Time ranges around 3131.

When we take a closer look at the same dynamics on the 3-weekly timeframe (figure 30) we can see where all our valid reversal zones are within each weekly period, and when each weekly timeframe completes, our Math and Time projects the new path. All we have to do it to manage the market path by using the 3-period cycles as the journey continues in step formation towards the Primary Goal. Each reversal in the 3-period weekly dynamic structure was precise and accurate. This 'Observed Phenomena' occurs on all timeframes, and as it did then it still continues today.

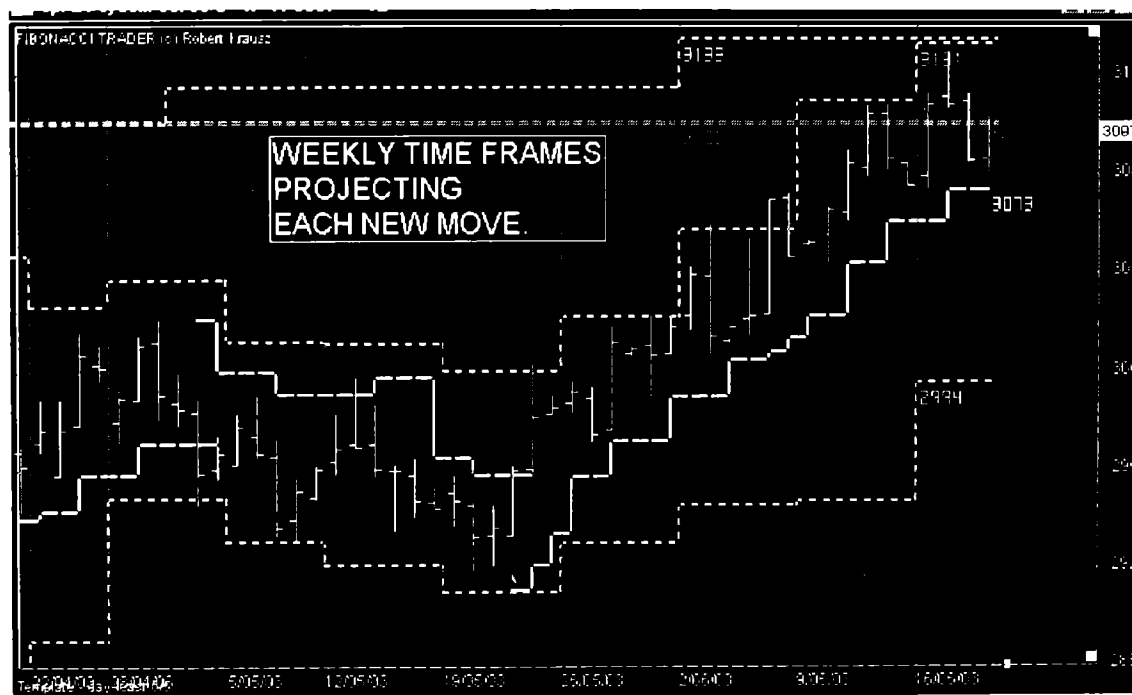


Figure 30.

However, like any reversal from these extremes, price still operates under the 'breakout' phenomena, remain outside the range until the new timeframe begins...

*"The purpose behind deciphering the market's timing also relates to profits. Who cares what the price level is, as long as you know what's going to be the turning point in the forecastable Time. The methodology of determining Risk-Reward should then only be based on the Time of past data instead of the Price of past data."*

## Math: and the market Path.

By using simple math ( $H+L+C/3$ ) to trade the markets, we have a clear understanding that Price has a certain path that it travels. By, using TIME and the calculation of  $H+C+L/3$ , we can see each sequence of rotation and extension at play. Once the path is understood, we simply wait for the mathematical sequence to take place. Price never has the same patterns, only TIME does, so when we see a certain mathematical sequence appear, the direction is already known and our 'profit objectives are already clearly defined. To have a winning day in 'day-trading' it becomes a simple process!

When TIME is involved, it becomes a conclusion, not a prediction.

Every 'market' must go a certain length of TIME to even be considered a trend, and the only thing I believe that can provide that definition trend is TIME and Math. The dynamic timeframes of the past 3-weeks, 3-months, 3-quarterly, and 3-yearly and then projected gives us a 'window into the future'. When we look the figure 30 once again, the movements of price as each new weekly timeframe maps out the path of the market whilst it moves within the 3-monthly cycles as it reaches the yearly 50%.

When we continue to look at the same cycles as the year progresses into 2004 we can see the same repetitive patterns and important events that give us the ability to make highly accurate forecasts and more important swing the odds into our favour.

We can see all the highs in the market for 2003 (figure 31) within the market structure based on the 3-monthly dynamics, each failure and we can see the fall back into the trailing 3-weekly cycle lows (red) as it continues with the trend and into the year 2004.

We are now over 600 points from the lows in March 2003.

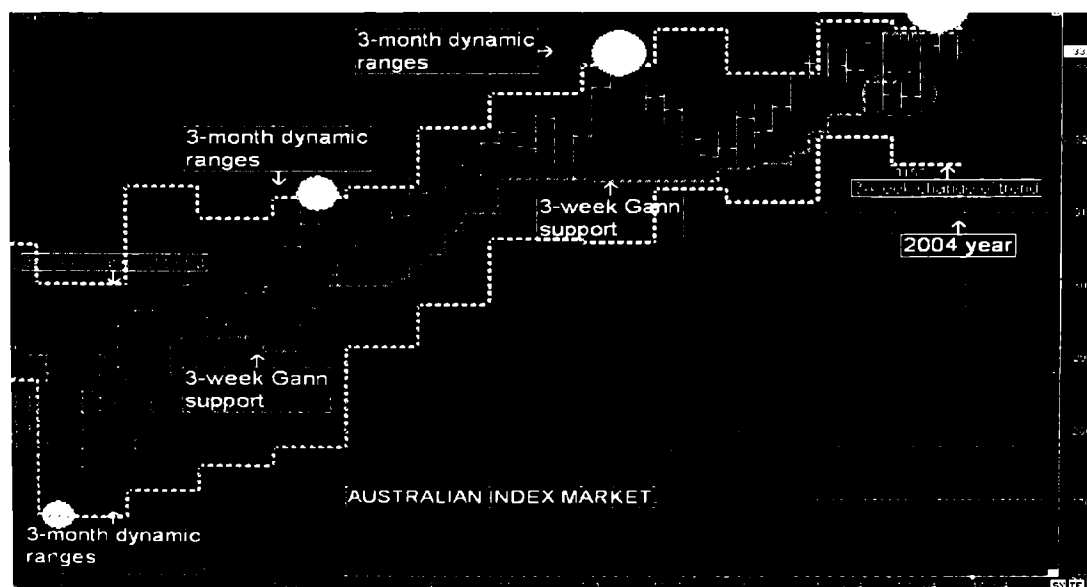


Figure 31.

## ***PIVOT CALCULATIONS.***

There are two different calculations when looking at 3- period ranges.

Just to remind traders of these timeframe calculations. When we look at single timeframes i.e. Daily, Weekly, Monthly we obtain our dynamic levels by the calculation of  $H+C+L/3$ , this will give us a new 'balance point' or 50% level. We then take the entire previous range and place it either side of the new 50% level.

However, when we look at anything above the single timeframe, we then use the calculation and introduce the 'fulcrum' also, the close in relation to the 50%. So if the market closes in the top half, then the trend is bullish and visa-versa.

We do the exact same calculation of  $H+C+L/3$ , but this time we double (X2) the new 50% level and then subtract the highs and lows from this double 50 % level.

For example,

High 3463

Low 3241

Close  $3424/3 = 50\% 3376$

Normally we would take the 222 point range and place it either side of the new 50% level, so the high for the new timeframe would be  $H=3487$  &  $L=3265$ .

For the Fulcrum, we would double the new 50% level  $3376 \times 2 = 6752$ . Because the close is above the 50% level of the range (bullish) we then subtract the low from this 50% level.  $6752 - 3241 =$  New dynamic fulcrum high of 3511

$6752 - 3463 =$  New dynamic fulcrum low of 3298.

We use this calculation for all 3-period timeframes on weekly, monthly, Quarterly and Yearly timeframes. I use both calculations, the fulcrum and the AMT pivot calculations, except instead of placing 50% either side of the new 50% level and then taking the past 3-time periods either side, I calculate the .618 of the range and use this as my extreme zones.

Both the fulcrum and the AMT calculations will have the exact same balance point (50%) but the extremes will vary depending on price action. The furthest extreme of the two will be my extreme range, target, and define my Market Risk. I will explain this in more detail throughout the book.

For US markets we use 3-period Monthly and **4 period Weekly dynamics** instead, using the calculation of .618 of the range from the balance point along with the fulcrum. So we take the Range and new balance point (50%) and add on .618 of the range on either side of the new 50% level for each timeframe.



For day traders of all derivatives use the 5 day dynamic range using only the day session timeframes (9.50am-16.30pm) to define Market Risk, whilst using the 24 hour time period of all the higher timeframes; 3 weekly period, 3 monthly and so on...

Take the past 5 days and calculate the balance point  $(H+L+C/3)$  and then take the past 5 days calculate the .618 of the range and then place over the new 50% level. This should be done each day, however the math is easily programmed into most programs to allow you to do this on all of the timeframes. This 5-day dynamic range defines Market Risk, which is extremely important, as I will show you in this book.

## 24-Hour Trading Markets.

The Market is driven by two different entities, and most derivative markets will nowadays trade over a 24-hour period, so that the trading day actually begins at midnight and not at 9.50am. For example, the Index futures of the Australian Market (SPI) will be driven during the day by its top 200 stocks, ASX200, but overnight, the SPI is driven by a total different entity, the US markets, namely the S&P. How the US dances overnight will normally effect our trading day. The many gap openings each morning are a result of the overnight action on the US markets, unless some 'news' hits the market before the opening bell.

So whatever market we choose to trade we must first acknowledge that the derivative or stock will be effected by the length of the trading day, remember our methodology is based on TIME and not on price, so for day traders that are trading only the day session of a 24-hour market it would be foolish to look at only the ranges of the day session. All the charts regarding the SPI are based on the 24-hour market because of the gyrations of the US market, and the length of the trading day; i.e. midnight-to-midnight.

### Overview:

Since the beginning of this book I have described how TIME and Math must be acknowledged in any trading scenario. Our methodology is to trade *any* 'Window of Opportunity', either trading towards the central points of Time or from the 3-day cycles towards the extreme ranges of Time within the market structure.

Before I continue I want to go over a few things before I move into the 5-day dynamic ranges and intra-day timeframes. Firstly, we must realise that the market moves in waves of TIME and not waves of Price! We are able to define these cycles in the market by using Math and TIME, this mathematical equation  $(H+C+L/3)$  allows us to know that TIME will project the next movement in advance, and by using the higher timeframes we are able to make long term forecasts with precise accuracy.

We also know that the cycle of '3' is dominate in our market and our market moves in waves of Time based on the previous 3-periods of TIME, these dynamic ranges allow us too make 'models of expectations' because of the ebb and flow between each dynamic 'Time' channel. We have a clear defined market path within the Primary Channel as shown in figures 30 & 31.

Lastly, the 3-period cycles of TIME provide us with the filter and necessary zones in the market to define our trades, so we minimise our risk and maximise our gain as we trade towards the dynamic extended targets, or our profit objectives within the market structure.

Cycles are defined by the two continuos bars based as explained... *"Gann's 3-day cycle was always defined by the previous 2 days of trading; a cycle was defined by two consecutive highs, or 2 consecutive lows. Whereas any other method would normally define a 3 day cycle, by the previous 3 trading days. The cycle would continue until the previous low or high was taken out."* And Math and Price using the pivot calculations of each higher timeframe define Market dynamics.

I want to go back and have a look at the 3-period dynamic ranges of higher timeframes as this will lead into the 5-day dynamic ranges.

Figure 32 shows the 3-month dynamic Range (yellow) projecting the market path of the larger timeframe, and as traders we filter out the market using the 3-week cycle zone, so our 'model of expectation' will be for the market to continue lower as seen in 2002.

One thing you will notice in the chart, the 3-month dynamic low didn't reverse in February 2003 but actually broke on the 13.2.2003, once this zone failed the rest of the month remained under this level. The 'floor' became the 'ceiling' and price continued lower into the next timeframe and the following 3-month dynamic range. I have already described this the only way to confirm the 'breakout' of the range.

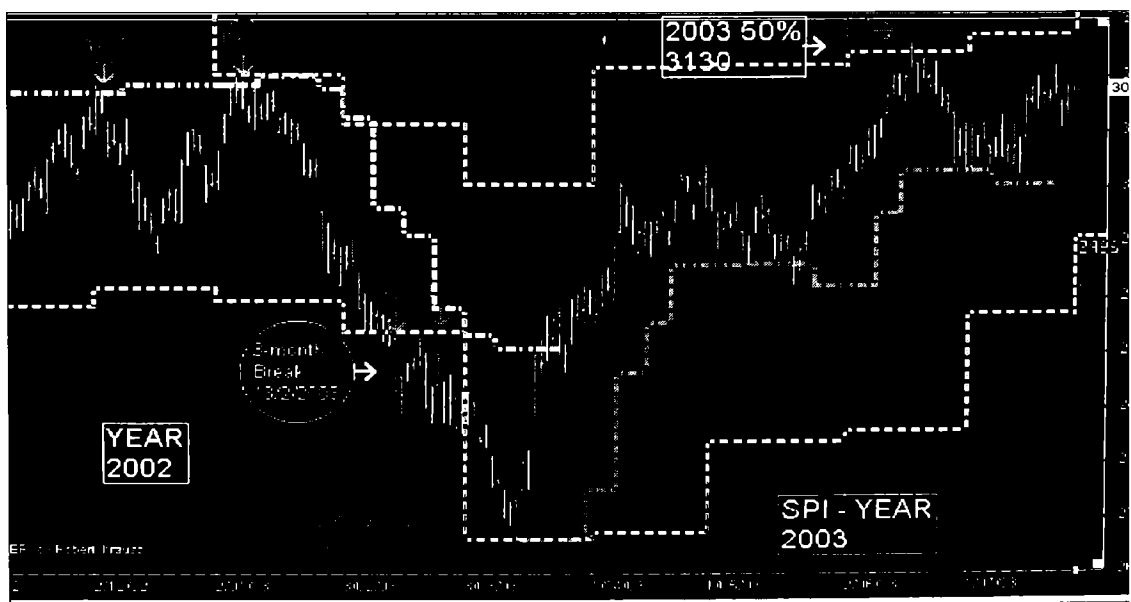
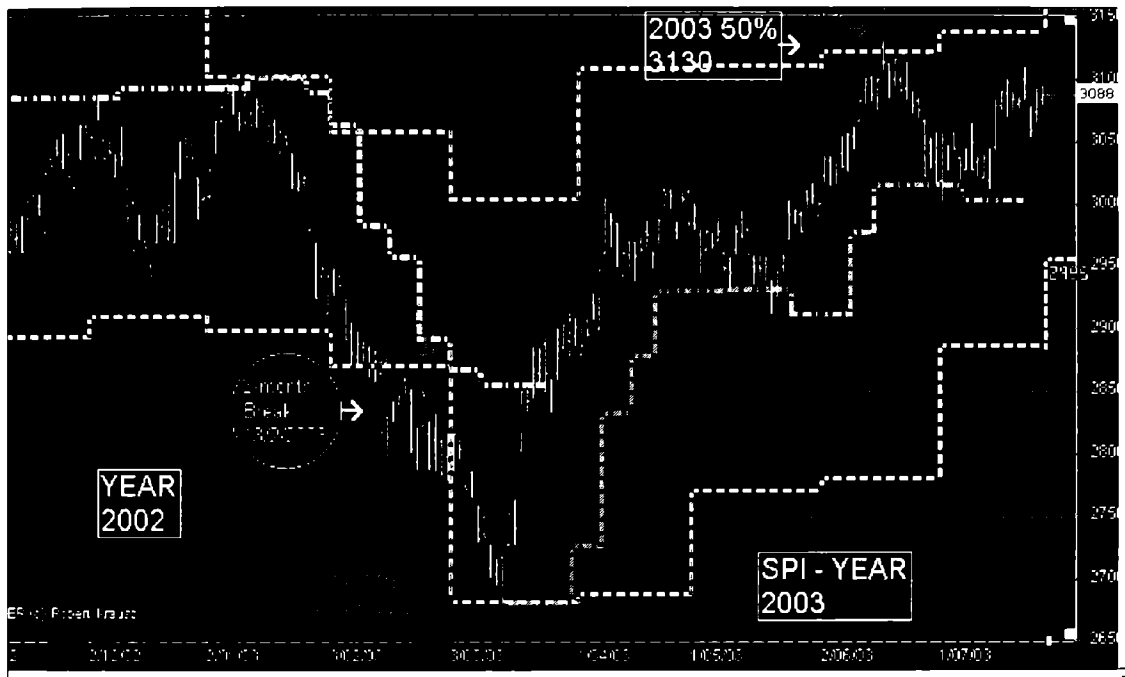


Figure 32.

When this similar pattern or breakout occurs in any 3 period dynamic range, whether it's the 5-day, 3-week or in this case the 3-month, there is a **high probability that price will remain outside this break until the new timeframe begins, and can chase the new dynamic range in the next timeframe no matter what timeframe**, as we can see with the March lows in 2003.



**Figure 32.**

Price moved from the break of February into the new lows in March 2003, an exact low in the market and reverse.

The reason why I have mentioned Floor-to-Ceiling is because for day-trading this same scenario applies, once the 5-day Dynamic range breaks the market will continue to trend throughout the day and 'can' continue into the following day as it projects a higher or lower range, before the market rotates back towards central zones.

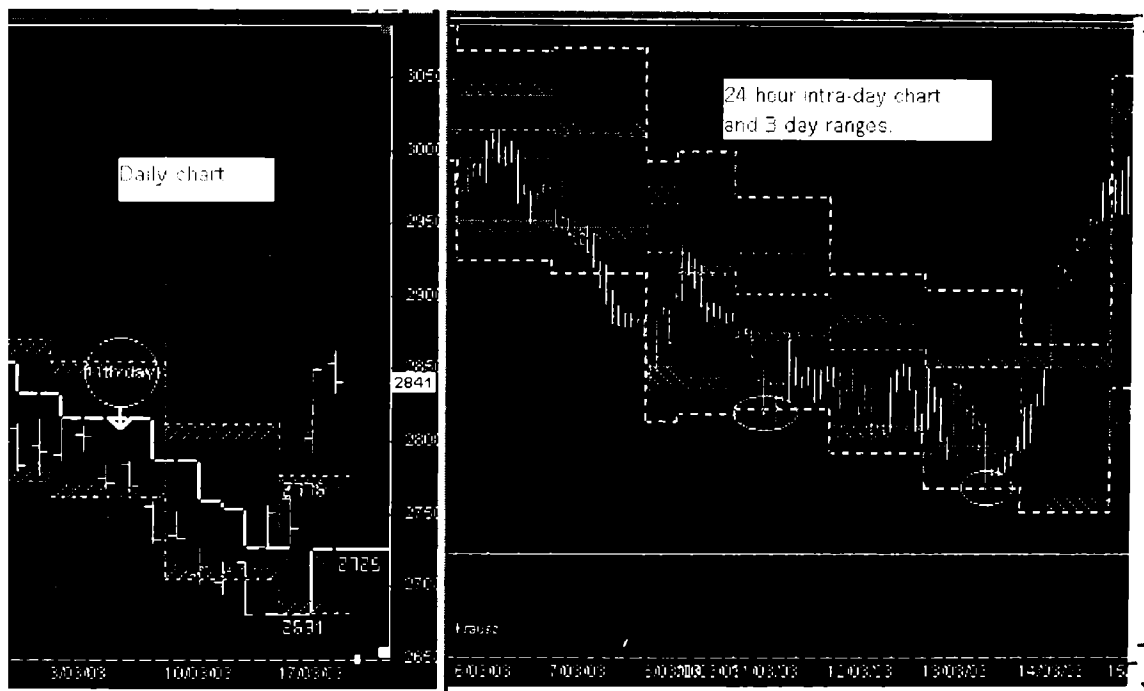
**It is important that we never trade against this break until the market has reached the next level in the market**, as I will describe over the following pages.

These dynamic ranges are highly accurate but it is not always a forgone conclusion that Price will stop and reverse at these levels, it is fine to make a 'model of expectation' that this is a forecasted zone but it isn't necessarily the turning point in the market either. That is why my post on the 14/3/2003 was only confirmed when price had broken back above the 3-day cycle highs. The variables were precise and accurate for it to reverse, but for me too make the 'call' that the trend had finally reversed I need a confirming tool and that was the 3-day cycle break.

## Daily Dynamic Ranges.

The same calculation using the Daily range,  $H+L+C/3$  will map out the market path for the trading week. This daily dynamic range and the 3-day cycle is a must for any day-trader.

This part of the book might become complicated for many who are just getting familiar with the concept or don't trade 24 hour derivative markets. If that is the case I wouldn't spend too much time getting bogged down with the intra-day trading strategies over the following pages but you will still see the same applies in the shorter timeframes as in the larger cycles.

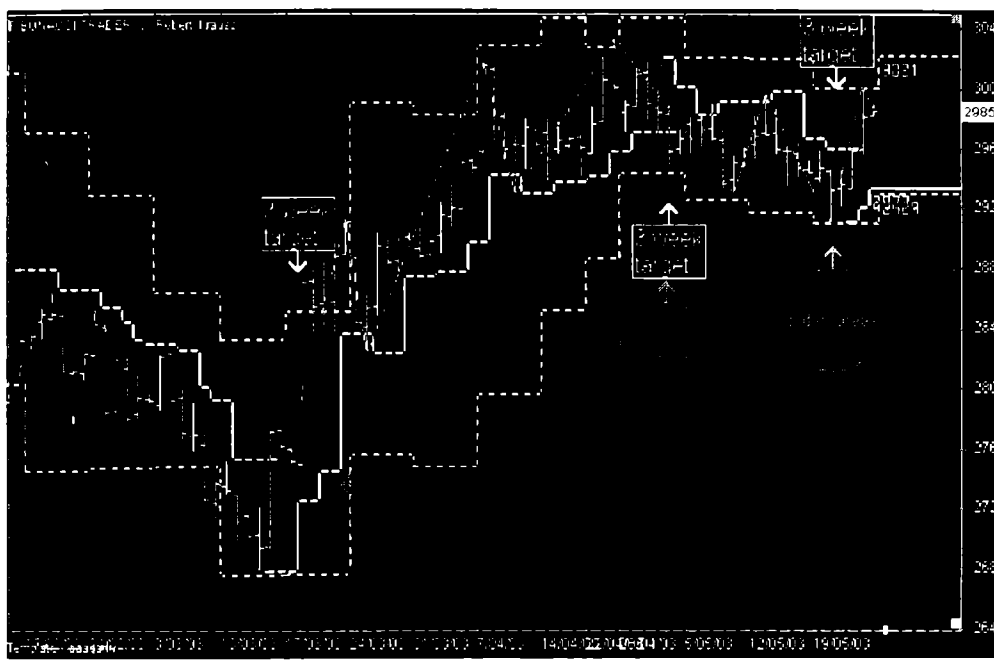


**Figure 33.**

Figure 33 follows the sequence and price action in March 2003 as it makes its way towards 2680. That is our target, and as long as it is in a bearish 3-day cycle then that's the only model of expectation we would have.

When we look at the chart on the right, we can see the 5-day dynamic range, each new day projects a new range low, and each new low is a profit objective within the 3-day cycle that traders could use. Whilst one trader might use these range lows as targets to trade towards another trader might try his luck at reversing these range lows back to central zones of the 3-day cycle. With tight money management techniques these reversal zones within the 3-day cycle could be part of another traders trading system. I will talk about developing trading systems in the chapter "Systems Development using AMT"

We can also see two instances (figure 33) where price broke these 5-day range extremes only to continue further. So even though a trader looking to rotate back towards central zones as part of their contra-trading method, once he or she was stopped out the trader could then make a decision that the break of the range has a high probability of a continuing trend within the current day structure and into the next.



**Figure 34.**

Figure 34 shows the likely market path for any 3-day break or change of cycle, once the break occurs price will make its way towards the higher timeframe level, the trend continues until a higher timeframe level is reached. So when a 3-day cycle change occurs our first reference and ultimate target is the 3-week Dynamic range. You will see this phenomena occurring all the time.

It is obvious that the further away the 3-week range is after a 3-day cycle break the greater the reward! So any 3-day break our view is for the market to move from one 3-day timeframe to the next, that being the 3-week dynamic range where price becomes exhausted until a new weekly timeframe begins.

Figure 35 shows the same events but we can see that the 3-week lows hadn't been reached 3029 (green low channel) but the market actually moved higher in the next day. This is just one of the trading scenarios after any cycle change and a 2-day swing.

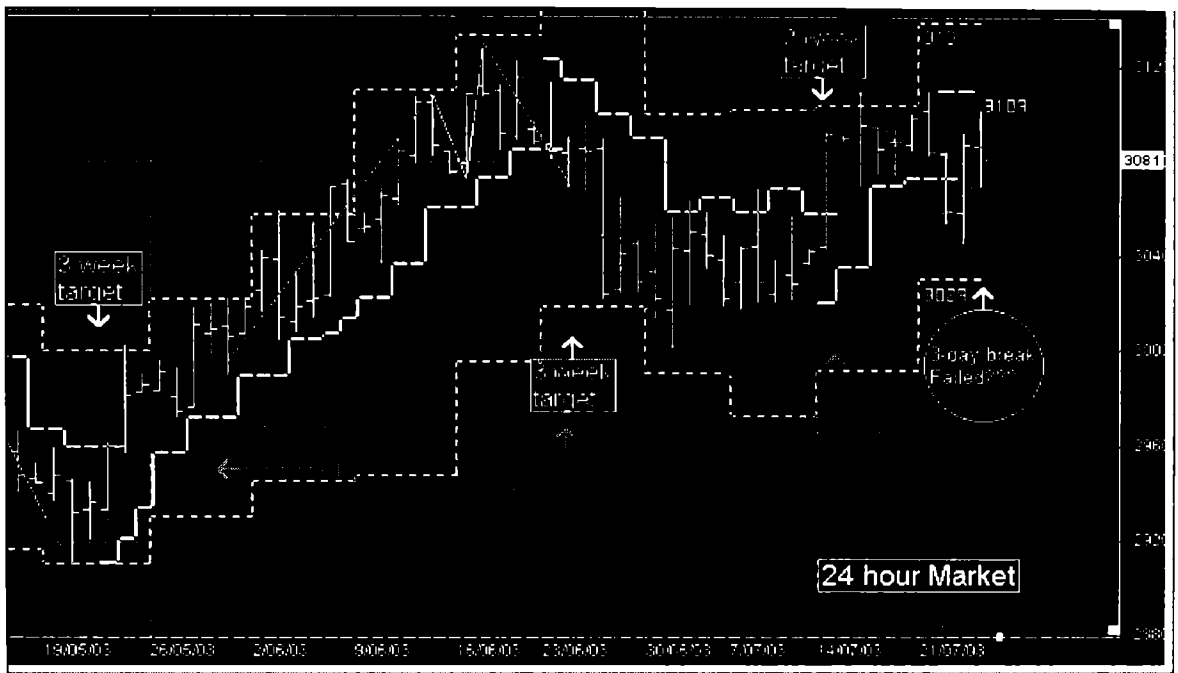


Figure 35.

However when we have a closer look (figure 36) we can actually see that the low in the market was near the monthly 50% level of 3053 and also the exact 5-day dynamic low as shown in the chart on the right. We can see in the same chart the clarity of Market Risk; precise levels in the market structure where price will reverse, or if it does break, remain outside the range and move into the next range extreme.

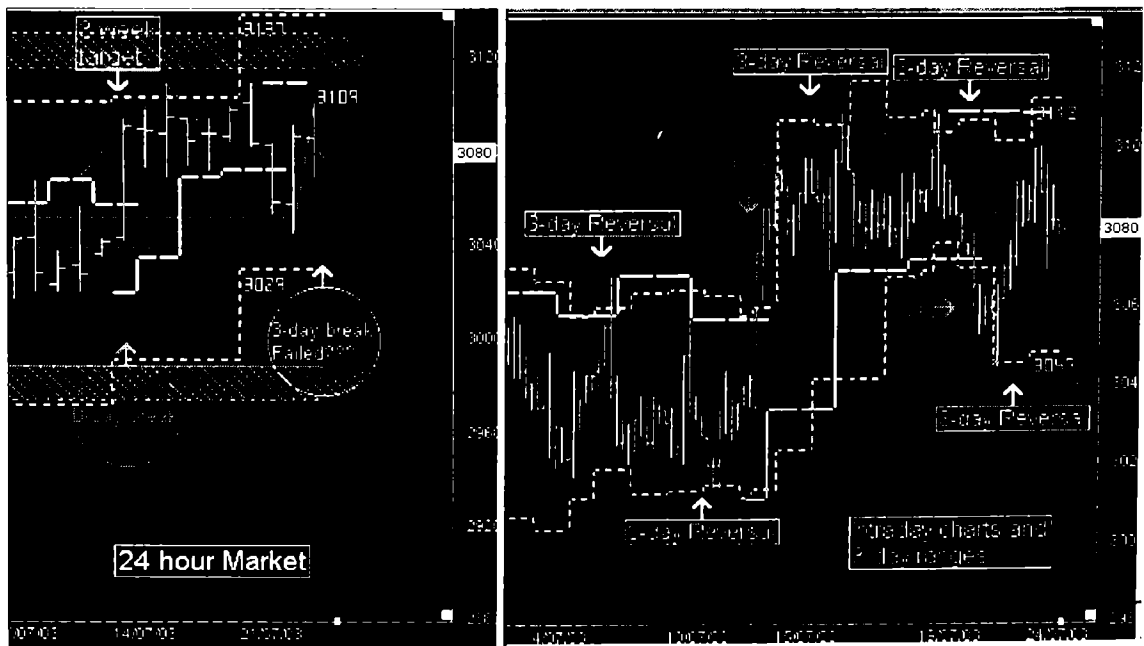


Figure 36.

## The intra-day 3-period cycles:

### Day-trading.

So what is the Optimum Time Frame to use as a day-trader?

Firstly, we must understand that each day is a sequence of the previous day; one day's data just isn't a good predictor for tomorrow. We also know that the market follows the path of the two higher Timeframes. As an intra-day trader, the minimum requirement is the previous day's trading and the close of the day. This will provide the trader with the next Range to trade based on the Pivot points. As day-traders, we **must know** what has occurred overnight to trade the following day. Wherever price opens, this will provide the set-up for us to trade. We have already defined that we are trading the rotation and extension of the weekly and monthly Pivots within the market structure using 3-day cycle.

If we know the path the market is travelling within the day structure, then we should NOT have a closed 'Mindset' that we will only be sellers today. If the *windows of opportunities* present themselves, then we should be going long and short within 'this day'. It is not the Price we trade that is important; it is the Time of the Trade that defines our intra-day methodology with a strict set of rules.

A 'day' is defined by the amount of TIME and range of Price. For any day-trader, the total amount of minutes that consists within the Day must be known for the Optimum Timeframes to be found. Basically, how many minutes are there between the open and the close of each the trading day? For SPI-traders there are 400 minutes of trading for the day session. I personally use the 8<sup>th</sup> of the range; therefore the 50-minute timeframe is my optimum time I use for intra-day trading.

Many day traders use a myriad of timeframes when trading, some look at 30 minute timeframes whilst another trader might solely rely on 3-minute timeframes, but it actually doesn't matter what timeframe you use whether 15 minute bar charts or tick data, Price will go where it is suppose to go. As long at each trader can identify the dynamic levels in the market and place trades using this methodology of Price-over-Time then using any timeframe will do. If profit objectives are clearly defined then exits can be placed in advance. This will be described in detail in the Chapter 'Systems Development'.

When trading futures I prefer trading as a Day Trader with clear defined entry and exit levels. Each trade will be based on the premise that '**price acts with some statistical tendency**', and that can only be determined by developing systems that have been back tested over a number of years that provide a positive-expectancy and dollar reward.

I have given examples using cycles and dynamics of the 3-period timeframes of price acting with a statistical tendency, the rotation and extension as Time moves forward. For day trading there is also statistical phenomenon of price acting in a similar way based on where the day opens in relation to the past 5 days of trading, this will actually determine the day type, 'Trending or Rotation' for the current day.

The open in relation to the past 5-days of trading (Single DAY CYCLE) will determine the trades and what action we would be taking. It is also important to know the average true range of the day, what has been the average length of day session of the past few years. Knowing this increases the edge as I will explain in Chapter 4; 'Range Bar... Time & Price'

**Single DAY CYCLE theory (SDC)**, is the statistical and probable outcome of any day. This will be described in the chapter "*Sequential Data and the single day cycle*" There are 24 different scenarios based on the open of the day, the 3-day cycle and the past 5 days of trading. This gives us a statistical probability that each SDC will behave in a similar way as the past, as long as TIME allows it to.

### Trading Thoughts.

Not every trader will trade the same even with the same information. We all have different profiles as traders, different strategies and methodologies and more importantly different 'Mindsets'. Trading is a numbers game! Trading is about **knowing** your dollar risk-reward. **Knowing** that tight money management techniques will keep you in this game longer than if you haphazardly applied stops when it suited you, and **knowing** we still operate under the understanding there is a random distribution of wins and losses. Basically we don't **know** the sequence of our wins and losses or how much money the market is going to make for us on each winning trade. Though we should **know** before each and every trade what the market is going to 'take', because we will have sound money management with each and every trade. The methodology of Analytical Market Trading is to give 'order to chaos' but more importantly, it allows the individual trader and his own methodology of trading a greater edge based on TIME.

As we can see in Figure 37, price has a certain path to travel, and understanding where these dynamic levels are we can determine with precise accuracy where Market Risk is. We begin to understand that generic Market Risk is the same for all; individual Risk is based on your own sets of rules.

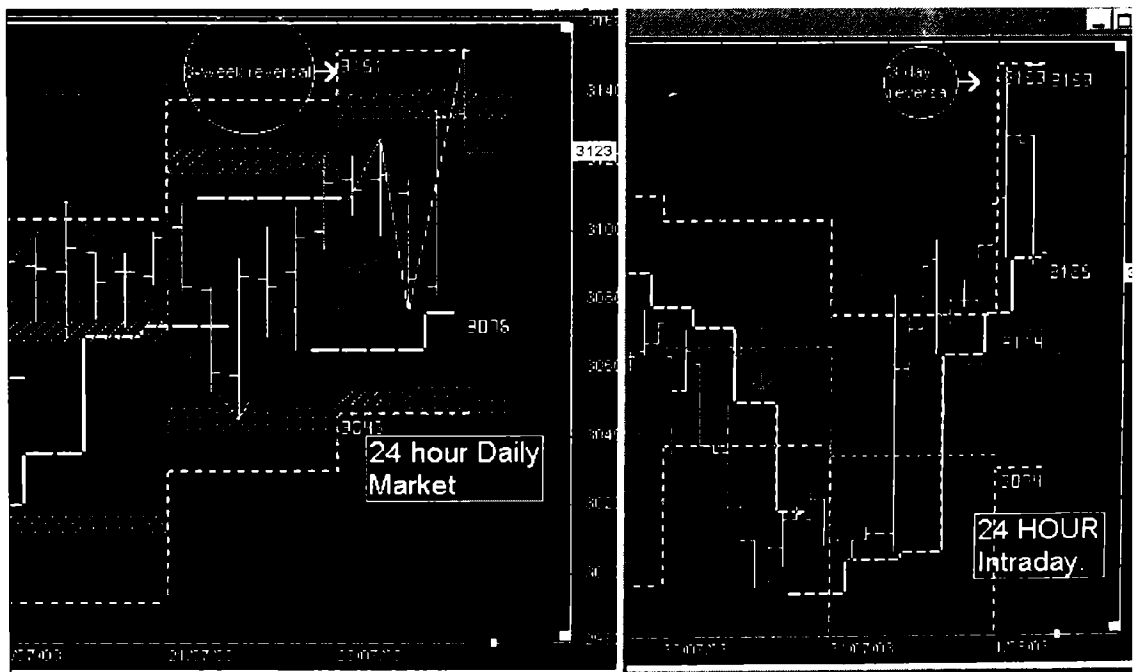


Figure 37.



## TIME sets the parameters.

Traders need to be reminded that TIME sets the parameters: it sets the path of the market, it sets the resistance and the support. When these parameters are broken then Price has a high probability that it will continue on until the new Time begins.

You will see this 'phenomenon' continually and will see it as the book continues, *'if time breaks then price can continue further to the next higher timeframe zone'*. What this means is, our model of expectation is that Price will remain outside the TIME zone until the next timeframe begins. It is not a forgone conclusion that this will always occur but a High probability scenario. Don't try and fade the trend outside TIME, we can see this clearly in figure 37 and the 3-day high break at 3116. For short term intra-day traders there still can be Times in the market when these 'fading' trades can occur, especially if the market follows the repeated cycles of intra-day trend reversals as will be shown over the coming chapters for derivative traders.

The same applies to the market path of TIME; each new timeframe provides a probable zone where it is likely to travel towards. Each trader can then adjust their own trading to how price reacts at certain points in the market, for day-traders trading in a 24-hour market then their concern will not be of what occurs overnight, whilst position trader's need too find the best possible zones when trading with a view of the likely 'price path' of the stock or derivative using the higher timeframe levels.

Figure 38 is an example of what I mean and this should apply for most 24 hour traded markets. We can see that on the left chart is the day only market (9.50-16.30) and the close of the trading week 3096, this gave us a weekly projected path of 3133 for the following week.

For the same market but over the 24-hour period, the market had continued on and closed at 3114. this had projected the weekly path to 3151 the following week. Based on the same market but different range of timeframes we have the day session 3-week high at 3133 but in the 24 hour session we have 3151, 20 point difference.

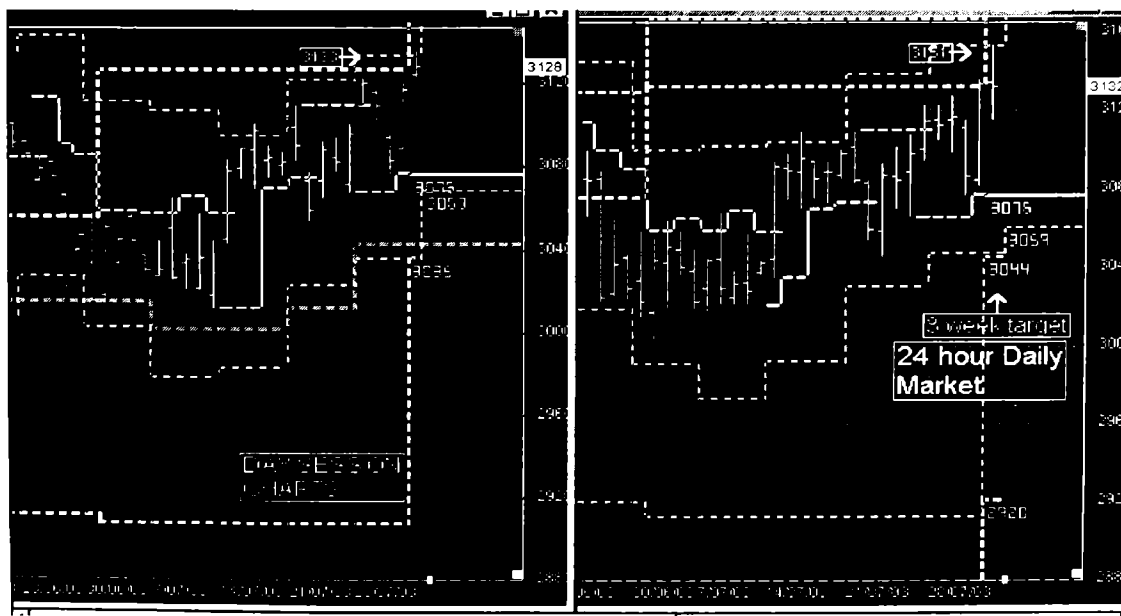


Figure 38.

We can see both 3-day cycle highs breaking near the tops and moving back into a 2-day stall before continuing with the current targets of those 3-week highs.

The thing you will notice is the 3-month highs in each chart (yellow), a high of 3126 so for the trading month of July it would find it difficult in moving higher even with our new weekly levels until the month closes, and then these dynamic levels will move higher in August, so therefore the resistance dynamically disappears.

Figure 38 illustrates what occurs on the last trading day of the month, Price rallies on the 3<sup>rd</sup> day after a 2-day stall and halts at both 3-month highs but once the month completes this resistance moves forward allowing both price to move towards the new 3-week highs. The market is allowed to move higher on the 1<sup>st</sup> August 2003.

The interesting part is the day session only moves to 3133 and stalls because TIME is less than what is in the 24-hour period and only continues onwards 'after hours' towards the 3-week dynamic level of 3151.

The parameter of TIME and MATH when determining where Price is travelling is an amazing phenomenon that we can all use. The same applies for other derivative markets and the same sequence of events and same market paths of TIME.

## **In Conclusion:**

*If one adheres to the methodology of 'profit forecasting' and risk-reward strategies then TIME needs to be fully understood in its role of affecting Price. If one can find some factor, in that Time is forecastable, then related matters on Price can become a model of expectations for high probability trading scenarios."*

*"The purpose behind deciphering the market's timing also relates to profits. Who cares what the price level is, as long as you know what's going to be the turning point in the forecastable Time. The methodology of determining Risk-Reward should then only be based on the Time." (Frank Dileria)*

Reading this, I'm sure people are still confused by what I mean. Let me explain... Time is the only constant variable in the market that is dynamic, because time is the only thing that moves forward. You can't go back in Time. Price isn't dynamic. Price is just a variable in the market that defines a perception of value to the participants.

So if that's the case, and Time is the only thing moving forward then we need to make a mathematical model based on this theory, because we are trading a Dynamic market. When I say 'time is the only thing 'forecastable', I know that on the 31st of October this current timeframe ends and the next timeframe begins. I'm forecasting Time; it's not too hard to understand. I then I apply a math model to all the constant variables of TIME.

The reason I do this is because **we begin to observe the statistical phenomena of the same price patterns occurring and reoccurring over and over again. This again defines Market Risk, not individual Risk; the market path within the timeframe and the ‘predictability’ of the movement.**

This book is not trying to predict the Market or trying to tell each trader that this way is the *new way* or the only way to trade. AMT takes a simple concept of TIME and the 3-periods of each allowing every trader a unique way of looking into the future. How long do I have in this trade? Where is the market going? Is Price in the process of rotation or extension? Has the trend changed? Where is likely support and resistance?

Any individual can use the above information to enhance his own unique way of trading. Whether you’re a 400-lot trader, a short-term intra-day scalper, or using a systematic approach with automated systems, this book provides a clear understanding that *the market travels a certain path in a certain time*. It highlights how the market continually rotates within itself whilst moving forward in TIME.

My belief is that the TIME of the trade is more important than the Price traded. Once we have an understanding of the sequence of events then traders can adjust themselves to where and when they will trade, how long they stay in the trade, and the most important is we begin to identify Market Risk.

Now we have a ‘Window into the Future’!

The next chapter takes a close look at the ‘Range of Price’ and a technique as important as all the others I have already spoken about. After the next chapter we will revisit Market Dynamics and introduce Timing Dates and proprietary services to provide a ‘window into the future’ and also shift the odds so we can maximise the true potential of trading the markets.

## Chapter 4.

### The 'Range bar', Time and Price.

Throughout the book we have seen how the movement of price is greatly influenced by the passage of time, and by simply calculating Time & Price we are able to define the market structure with precise accuracy. These recurring patterns in the market have a statistical tendency to continually appear and reappear over and over again, and as traders we have a visual inflection of the market to make highly accurate forecasts and hopefully successful trades. There is no point in knowing or providing oneself with a model of expectation without actually trading it. Even though it might make us feel good that we 'predicted' a move, you might as well pack your bags and give up trading if you don't find some way developing a profitable system to trade 'our models of expectation'.

The easiest way to make money in the market is finding a 'trend' and trading that trend, letting the profits run whilst cutting our losses. Most trend traders will develop a system around a 'breakout' and either adopt money management rules based on pre-determined profit objectives or run trailing stop losses; a perfect example would be the break of the 3-day cycle and trade towards higher timeframe dynamic ranges. Now each trader will have varying success even though a group of traders will trade the exact same system, and those reasons usually stem from individual money management rules and the size of the stop loss. Sure a tight stop loss might save your skin on occasions but you don't want to be stopped out only to watch the market go in the direction you wanted it to go in the first place.

The zone of the breakout using higher timeframes and the 3-period cycles defines the strength of the trend. Keep in mind that even though a 3-period cycle breaks, the movement might only be a rotation towards a central zone, and in fact it's not a breakout. A breakout has to be defined by the extreme of the timeframe, and we have seen these extremes provide the necessary support and resistance for the remainder of the timeframe in question whether trading derivatives or stocks. What looks like a breakout when using conventional technical analysis can easily be a trap for many unsuspecting traders because of the dynamic ranges of the higher timeframes, and more often than not reverse back and look like a 'fake-brake'.

I now want to change tactics and focus on Price and remove TIME all together. You are probably thinking, "*Hang on, we've just defined the market using TIME and now you want to get rid of it, what's going on?*" Well that's correct, but I'm now going to look at the **Range of Price**. The Range of Price is not what we normally think it is, the Range of Price is actually the entire range including 'Gaps' that have occurred in the market, so any chart we view, whether a daily bar chart or an intra-day chart will have a continuing flow. When we take a close look we will observe the same recurring patterns in the market that has been described throughout this book; movement from central zones of TIME to the extremes and back.

The reason we use a 'Range bar' is because we want to be able to ride any trend as long as possible and remove any fear that might effect a trader, and traders do have the ability to sabotage any trade by thinking of negative outcomes even though there might not be any around.

Figure 39 is a chart of BHP, which is a mining stock that also trades in the US, because of this the stock is volatile and can 'gap' a lot because of overnight price action which is heavily influenced by the fluctuation in commodity prices. We can see by the daily chart on the left the amount of *gaps* that has appeared in the price of the stock since the start. For anyone, the fear lies in the notion that these Gaps in the market might whipsaw a trader out of their position only to see the market run away in the direction they were trading, or for some it could be the fear of giving away profits; and fear is a real threat to the psychology of any trader.

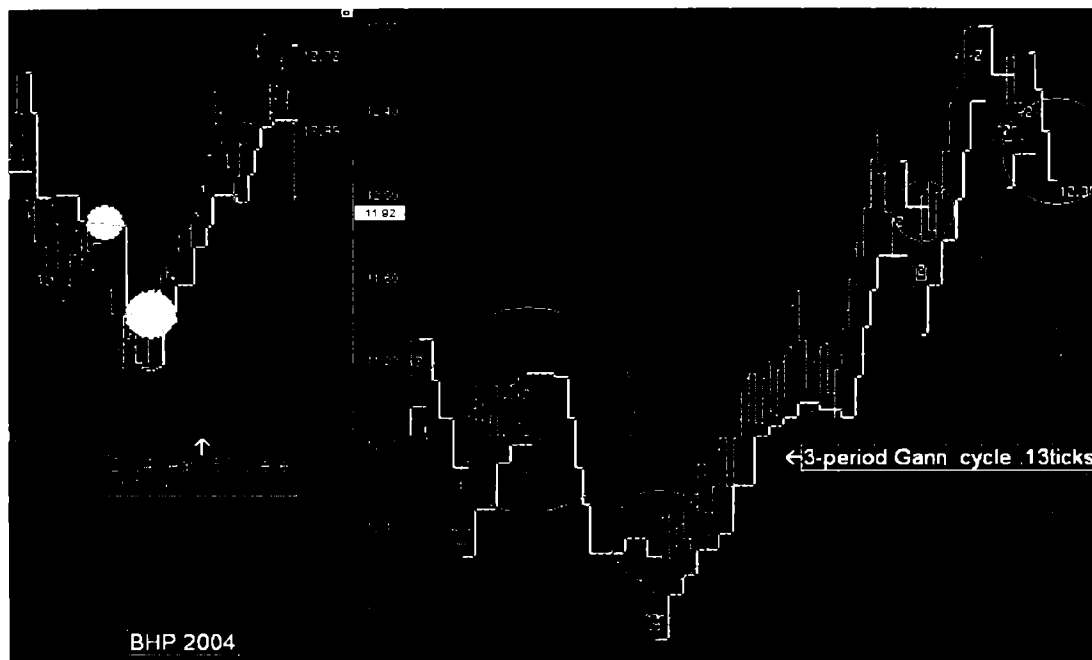


Figure 39.

The chart on the right is a 'Range bar chart' of the same stock, but a range that the individual trader decides to use to fill all gaps. In this chart I have used the range of 13 points, so any movement in price in a direction of 13 points (*or because the stock is in decimals, the range is .13 cents*) will draw a new bar. And when we introduce the 3-period cycle using this range the market can be clearly traded whilst riding the trend.

For example, the daily 3-period cycle (white) defines the trend in the left chart, but we can filter the stock using the Range Bar as part of our 'money management' rules. So if the 3-day cycle is trending in a direction (filled circles) then all a trader has to do is trade using the Range bar and its own 3-period cycle as shown in the right hand chart in Figure 39. And even though you might be running trailing stops using this, once the reverse occurs, a trader can re-enter the underlining direction of the daily trend using the same technique.

The Range Bar is a perfect tool at eliminating noise of price because it simplifies the price action and helps to remove any fear that a trader faces. It also helps a trader remove all lagging price indicators that continually give a 'false' impression of the market, by suggesting the market is 'overbought' or 'oversold', as many lagging indicators do. I'm not a fan of using any indicators whatsoever because they are inherently late, and I don't believe they give me any edge at all.

Each stock or derivative will have its own unique 'Range of Price' that fits well with the individual market structure, and short-term traders can actually run two varying lengths when trading the average length of any bar in the market. For example, a trader might want to back test the Range bar of 55 points and then trade a shorter length range bar for any probable trades until the 55 point bar range is complete. This type of trading will be explained in detail as we continue on with the topic in this chapter.

## Origins

A Brazilian broker and trader - Vicente M. Nicolellis Jr, conceived the 'Nicolellis Range Bars' in 1995.

During 13 years running a trading desk in Sao Paulo, where local markets tend to be volatile, he wrestled with the problem of how to handle this volatility and its variability. Finally he concluded that the most promising approach would be to eliminate time from the equation, and just concentrate on price. After all it is price that you trade (rather than time, unless it is an options market). Essentially this reverts to the early days of Technical Analysis, and the use of Point and Figure Charts, which just record price change. By using a constant range, ex. 10, and opening a new bar once that range is covered, one can also apply modern concepts of indicators, which are bar based. In 1996 the concept was computerized, which meant that many more markets could be studied. Experience in the last 8 years has shown that Nicolellis Range Bars are particularly good at focusing on and clarifying movement. The way in which a long meandering, horizontal "congestion" is condensed into a bar or two, concentrates attention on the essential underlying price movement while eliminating unnecessary "clutter" and "noise". This also makes the use of Trendlines easier.

The range bars just look price, the bar does not close at a specific time but closes when a range is complete, then a new bar opens.

If you have a market that moves from 1 to 9, then 9 to 1, then 1 to 9 during 2 days, if you create a range bar chart of \$10 you will only have a bar that goes from 1 to 9 during these 2 days and this bar is not closed. If the market moves to 10 then the bar closes and a new bar opens with open price at 10. This new bar now must have \$10 range to close. Let's say the market goes back to 6 and then up to 17, the last range bar closes at 16 (making a range bar from 6 to 16) a new bar opens with open price at 16 and this bar's price is now 17. This new bar has now a range of \$1 (16 to 17) and will wait until a complete \$10 range to close.

As a trader who has uses Range bars, I do recommend others find some way of incorporating Range bars as part of their trading systems to clarify the movement in price over time and also develop money management rules to maximize the trends that occur in the market.

### Range Bar, 'a window into the future'.

Let's take another look at the Range bar along with dynamic Timeframes so we can find some way of getting in early at the extreme of the range in a trending market. The reason we want to do this is because the markets do spend time rotating and consolidating after any trending period, and we want to be able to trade any 'probable rotation' towards a central point in TIME, essentially trading against all trends. This type trading will especially suit a derivatives trader looking for an edge, whether using mechanical systems or trading discretionally in a systematic fashion. Figure 40 is a chart of the financial index. So instead of trading a group of banks, traders might want to leverage themselves by trading the financial index. This daily bar chart is showing the higher timeframe extremes using the same concept of Math, Time and Price but this time we are using the past 5 months to provide the necessary dynamic market path we are looking for. So as each timeframe closes we do have a 'model of expectation' that price can go higher within each monthly timeframe whilst above the 3-week cycle, and we can clearly see this is the case.

We can see the resistance zones at each dynamic high zone but once we reach the month of March 2004, price actually breaks those highs of 4271 and continues higher. The 5-month dynamic highs are achieved by taking the range of the past 5 months and using  $H+C+L/3$  as described throughout the book.



Figure 40.

Remember each entity will have its own unique rhythm, the Australian Index (SPI/XJO) operates using 3-period dynamics of the higher timeframes, the US market (DOW/S&P) follows closely using 4-period dynamics, the Financial Index in this case uses 5-periods, and back testing the European indexes I found that they seem to follow the 5-period dynamics of the higher timeframes. The only way you can find the unique relationship between any market and stock when using the AMT methodology is through your own back testing. The minimum is always the 3-periods of Time.

So a trader who would normally short from this higher zone (4271, March high) would have been stopped out, hopefully they would have gone long to this zone in the first place but any 'short-trade' would have failed, and we need to keep in mind that such a break of these ranges, price can remain outside until the new timeframe begins in the following month of April. So 4271 is still a critical zone but now it could provide support for the remainder of March 2004.

But what would have happened if a Trader with a clear defined 'model of expectation' of price going higher in March towards 4271 used a Range BAR to filter the market. So instead of shorting at the highs of 4271, actually exited the trade and waited for a confirming reversal in the market before considering such as trade using the optimum range of the index. I say 'Optimum Range of the Index' because each stock or derivative will have its own unique Range of movement. What might be ok for a stock like BHP using a 13-point range bar might not be when trading the financial index, and can actually whipsaw a trader out of their position. So for the financial index I use a Range of 22 and when we have a look at Figure 41 we can see the trend remains intact.

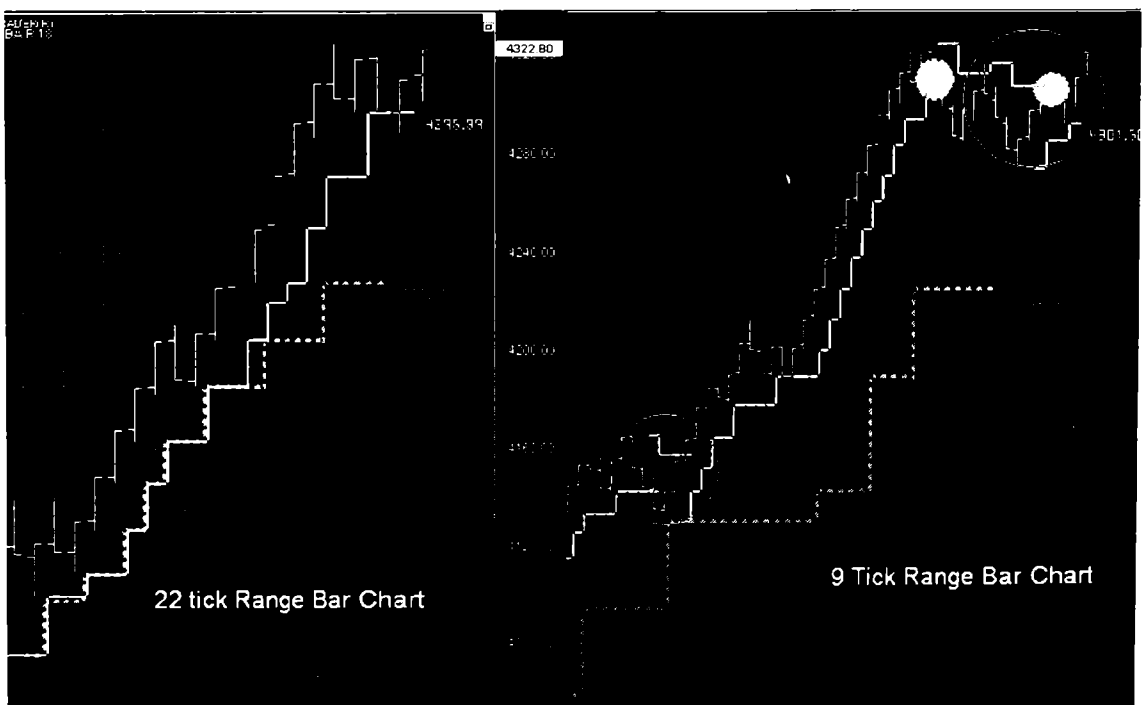


Figure 41



You can always filter any intra-day optimum range even further; I would normally use a 3<sup>rd</sup> of the range or in this case the Range Bar of 9 (right chart). Traders can run stops tight stops using these range bars and 3-period cycles. This is what I mean about running two varying lengths of range bars, the 9 bar range alerts the change of trend but the 22-range is the optimum length. Once the 9 bar range moves back above its own 3-period cycle high once again in late trading (confirmed by the close of the bar) traders can either re-enter on the LONG side as had previously occurred many days ago (earlier circle) or other traders wanting to short the market have a clear picture that any probable short is now open to RISK. The 22-range bar cycle has been long since 4060 and is still trending over 250 points at this point in the market and could continue into April's new dynamic highs.

## **Optimum Range of Price.**

The optimum range of price will vary depending on the entity traded, and the simplest way of finding this optimum range is by visually eyeballing the chart and finding that the market statistically will complete precise 'range bars' or using the 'average true range' indicator and find what is the statistical average of the range over a long period of time. You will find for any market there will be a Range of Price that sticks out, and when each range is complete price can actually reverse. What I mean by that is, the market will trend in one direction but when the Optimum Range bar is complete the market can at that point actually reverse and complete another 'exact' range bar in the opposite direction.

Figure 42 is of National Australia Bank showing the weekly charts and yearly Primary ranges. The Chart on the right is showing the optimum Range bar of NAB, this optimum range is 155, or \$1.55. We can see the rotation of price in waves of 1.55 and most of the reversals are occurring over this 1.55 range, so any trader developing a system once the system completes the 1.55 range the system is open to Risk because of the probability of reversing, or a trader has a valid profit objective once he is in a trade based on the completion of the Bar. A trader now has a statistical edge of a profitable return based on the completion of these bars.

As I've explained throughout this book, the weekly Gann cycle defines the secondary Trend of the market along with the Quarterly 50% level and we can see in the above chart how the weekly Gann cycle has defined the Trend. But in the chart on the right we can see a 3 bar reversal break above 30.80, this actually precedes the break of the 3-week cycle of 31.11 when price breaks the highs of the 3 bar 1.55 optimum range, it then statistically moves upwards completing the 1.55 range once again at 31.78.

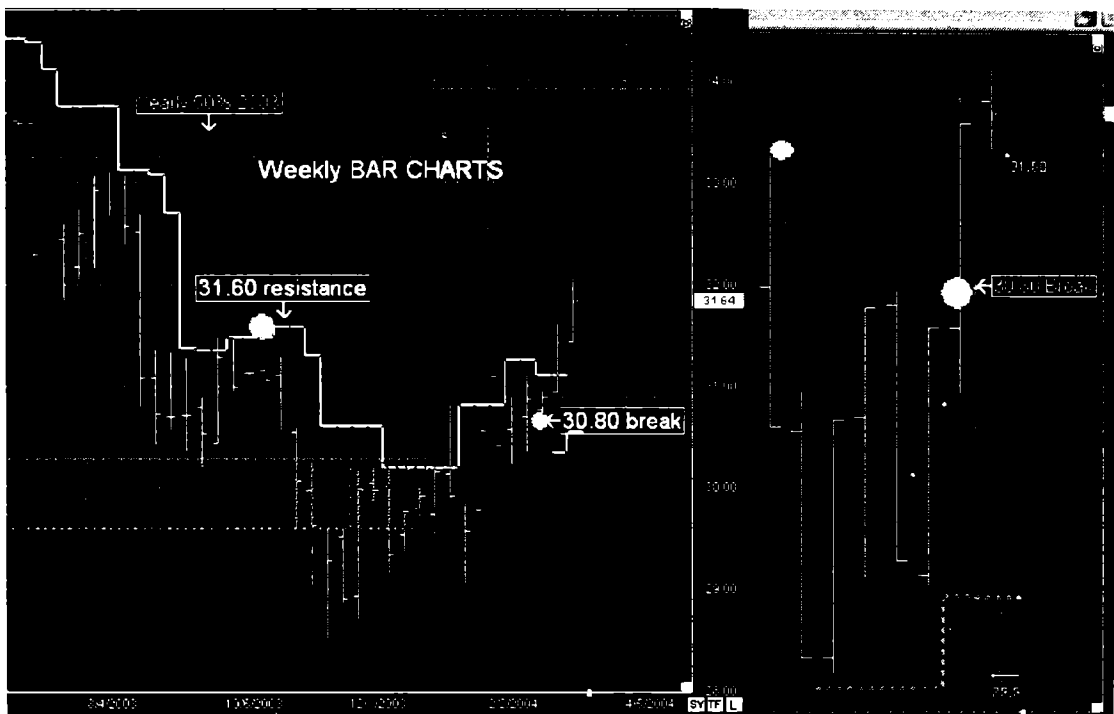


Figure 42.

The best filter when trading is using the period of 3, by that I mean, once you find the optimum range bar the best filter is to use approximately a third of that range. We have seen the reoccurring patterns of price movements over 3 bars, for example a 2 day stall 3<sup>rd</sup> day rally and even when using the optimum range bar the same principles apply; the movement of price in 3 bar waves, and we have seen this when the 3 bar (1.55) high breaks out at 30.80.

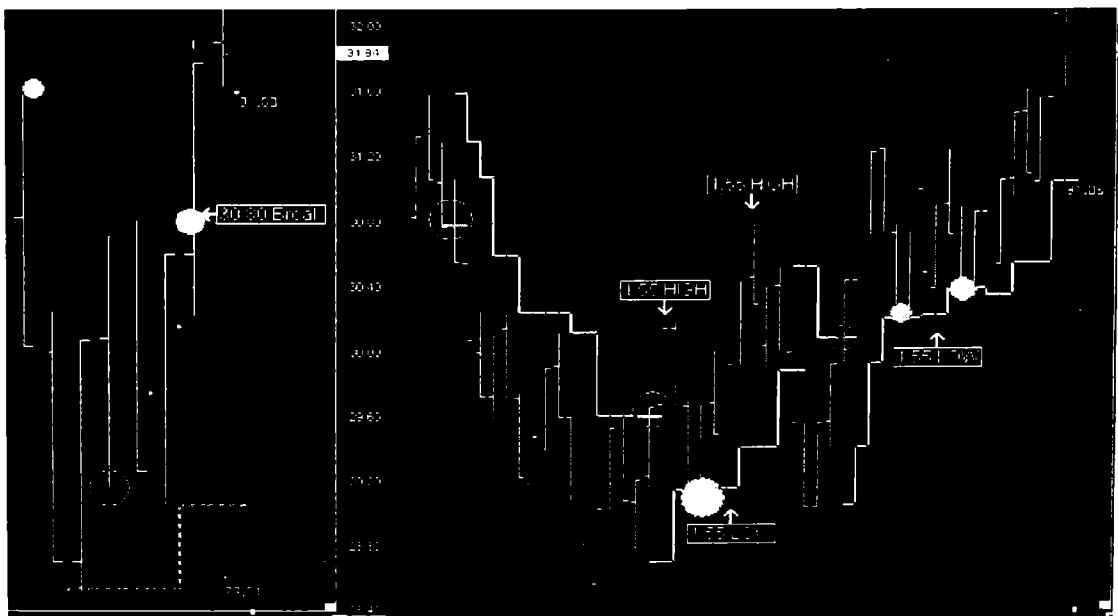


Figure 43.

The 3<sup>rd</sup> of the range filter is .515 and we use the exact same principles of the 3-period cycles to filter the movement of Price. In Figure 43 we can see the 1.55 range in the left chart and in the right chart we have the filter range bars giving us a statistical edge whenever the market breaks these highs. When you have a break of the .515 we have a reference of the price moving to complete the 1.55, and once that occurs there is a probability that a reversal could occur back into the trailing 3-period cycle lows.

Notice in chart (figure 43) how each higher 1.55 low is actually being supported by the .515 3-period cycle low and then price moves upwards to complete the next 1.55 high, and the same ebb and flow of the market continues onwards. A trader has a simple system of statistical probability of price moving in a direction that has a statistical edge. The trader has well defined levels in the market to trade from (break) and well defined levels in the market to profit by. He or she has now an edge that is well defined and all they have to do is develop their own money management rules. Each trader should now be able to eliminate any fear that comes with trading because we believe that price will follow the average true range and complete the bar.

These filtered Range bars do provide the trader with clarity because it eliminates the noise, and traders can develop mechanical systems based on what the 'model of expectation' is, now based on a statistical move in a statistical length of price.

Any systems that are developed can be based around smaller timeframes and/or range bars. Or traders can be simply trade from any Range Bar 3-period zone discretionally, in a systematic way whilst running stops outside the 3-period cycle zones. Traders should develop sound money management rules based this concept by either exiting at the range bar extreme or filtering out the time of the trade with any shorter mechanical based system. Remember we do have precise targets to trade towards, so re-entering the market based on the completion of the range is what trader's should focus on.

## **Double Bar Optimum Range Bars.**

The movement of the market normally follows a 2 bar stall with the 3<sup>rd</sup> bar confirming move; the trending bar, confirming any break or continues on as part of the trend. We have seen this price action whenever the market breaks a 3-day cycle; it can either rally or stall moving into a 2- day rotation before continuing with the new cycle and trending towards an extreme range (3 week dynamic range). As seen in Figure 44 the market moves to extreme points in the market based on the 3-week and 3- month dynamic timeframes.

We can also see in the daily bar chart of the Australian Index futures (SPI) the amount of time and days the market spends moving from one point in the market to the next. For day traders the use of the SDC (chapter 5) would be used to help the trader have a statistical edge in the market as they confront each day, however there still is a lot of noise for any inexperience trader trying to understand where the market is headed.

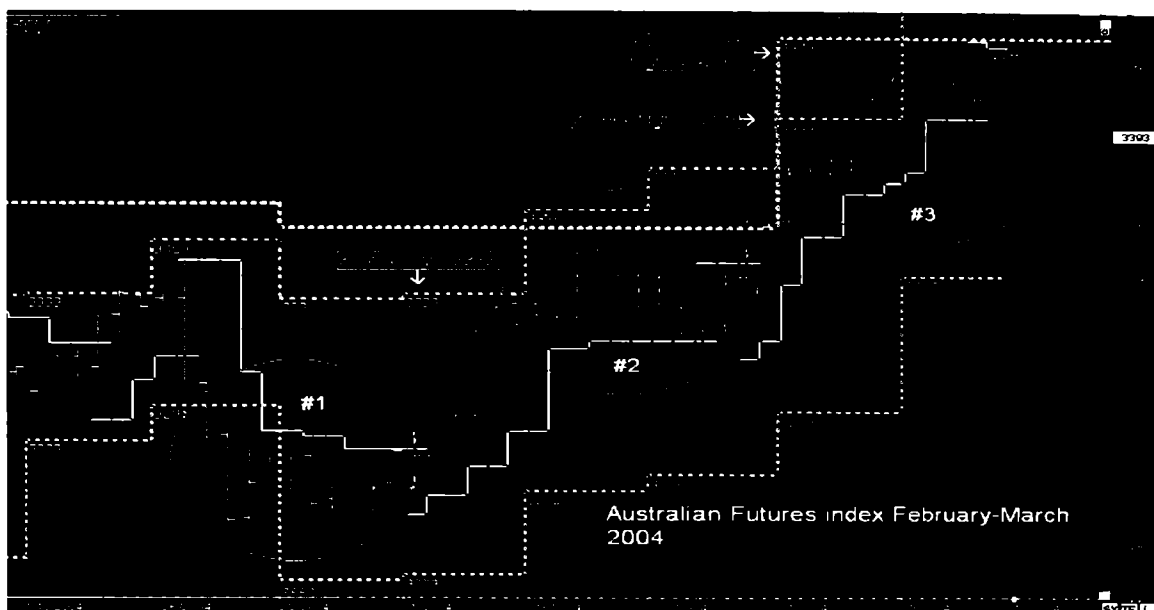


Figure 44.

There are many zones in the market where a trader could have traded from, such as the break of the 3-day highs towards the 3-week dynamic highs #1. This is a probable move that continually reoccurs within the market structure as described earlier in the book. There are also reversal trades from extremes based on statistical probability of these 3-period dynamic zones of the higher timeframes failing #2 & #3. (February & March 2004)

As described earlier, *the probability theory of price action is outweighed by the probability of statistics of these reversal zones and returning profits above zero dollars.* This statement will become clearer over the next few pages.

The Optimum Range of the SPI is 27 points and provides the trader with clarity without the noise. The Optimum Range of 27 points will always provide the trader with an idea of where the market is headed as it moves within the 3-period daily cycle, and if 27 points is the optimum range or average true range then the same 3-period cycle using 27-points is used.

In Figure 45 we can see the probable moves of the market moving in 27-point waves, and any reversal from any extreme has a high probability of pulling back a minimum of 27 points. There is also a high probability that whenever the market reverses and completes the 27 point range move, price will normally move into a 2 bar or double bar optimum directional move. This directional move will normally follow if the 3-period cycle breaks, or tests and bounces continuing on with the trend from any trailing Gann zone as seen in the right hand chart. It is the same process of two bars in the same direction, and if this is the case we should be looking at ways for trading this phenomena.

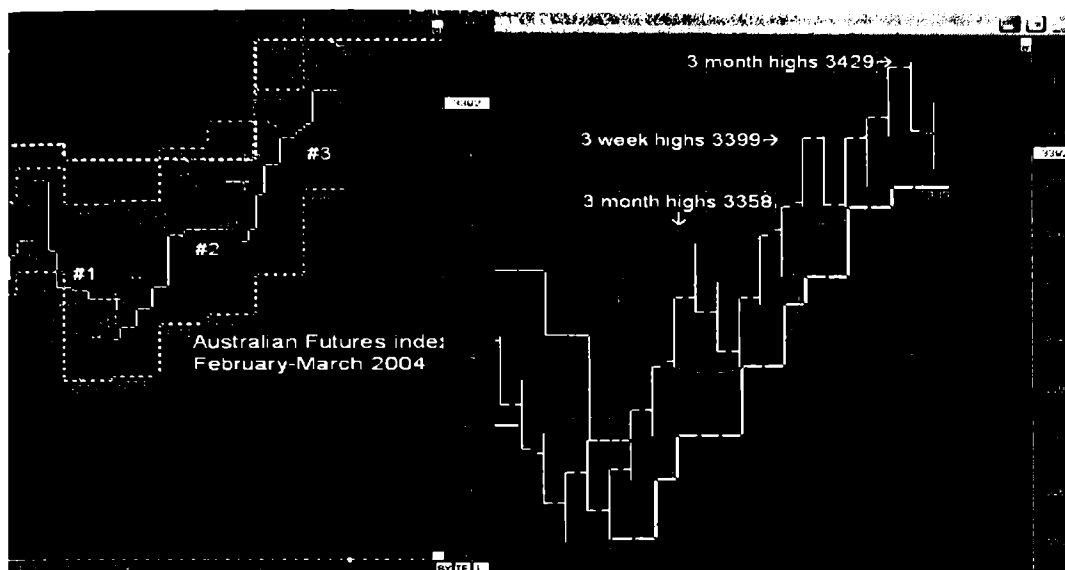


Figure 45.

We need to be reminded these Range bars are independent of TIME, however Time plays a very important role as seen in Figure 45 as we can see the failure at each 3-week extreme high and then each preceding move down is a minimum move of 2 bars of 27 points. The only failure of a double bar down 27 point occurs after 3399 reverses however we need to keep in mind that price has broken above the February high and we can see the confirmed break on the 3<sup>rd</sup> bar as it continues towards the new March highs of 3429.

The double bar is a phenomenon that continually reoccurs on most Range bars as long as the TIME zones allow it to as described above.

We now have the optimum Range for the SPI of 27 points and we should now introduce a filter range bar for intra-day strategies. This will be a 3<sup>rd</sup> of the range, so we use a Range bar of 9 and keep in mind that the Range of 9 can follow a very similar market structure of any 3 bar cycle. Our focus is exactly the same; once a 9 point range reverses as a confirming tool then our focus is to trade the completion of the 27 point move as the first profit objective.

Figure 46 illustrates what I mean. Have a close look at the market movement of each range of 9, there is a high statistical probability that there will be a 2<sup>nd</sup> range of 9 in the same direction as a reversal bar. So for day-traders this is a must, because there is no point buying if the previous bar is the first bar of a reversal down bar or visa versa. This price action alone swings the odds in the favour of the trader because it clarifies the price movement and should in fact help a trader minimise any losses from trading too early, and again help maximise any gains of trading the direction of the market.

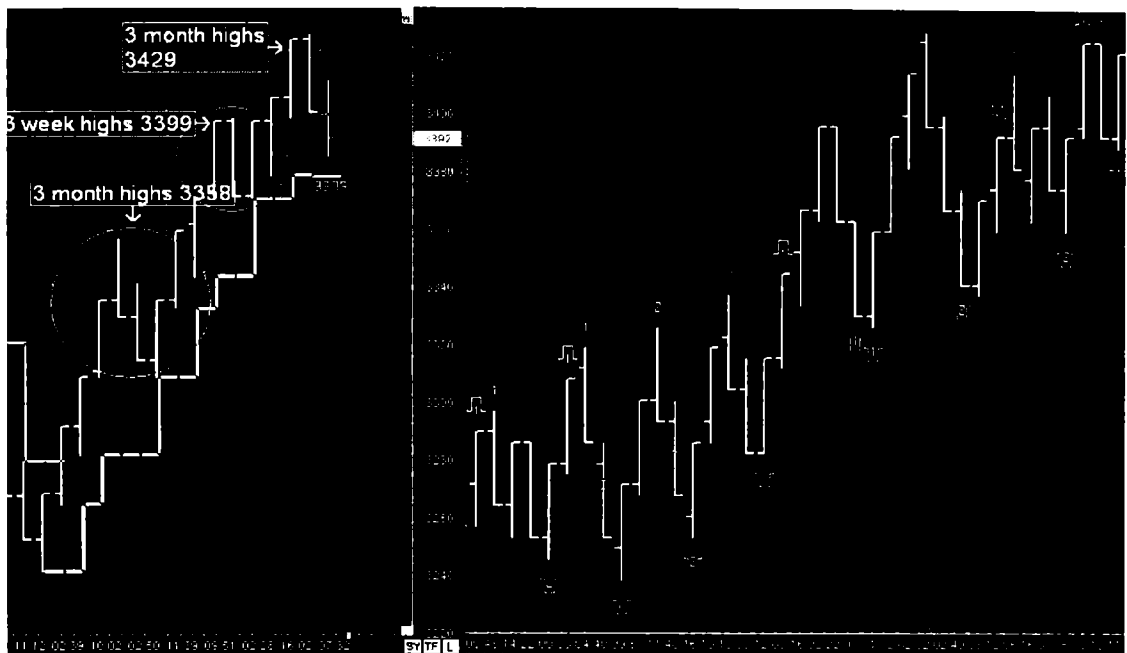


Figure 46.

By developing a mechanical system that uses the above price action and using only the reversals of each 2-bar move we can see how profitable it can be even without any stops in place. Since the start of the trading year 2004 (approximately 40 trading days) by taking the trade in reverse of each 2 bar move against the trend, the system returns 353 points (\$25 per point per contract) and a success rate of 75%. Keep in mind there are no set rules in place or stops, it is an automatic mechanical system that is open to all market forces.

Performance Results for APSPOT24 Range 9 D-W System Least R5C	
From 12/31/2003 10:46 to 3/12/2004 10:48	
Gross Profit	657.00
Gross Loss	-315.00
Net	342.00
Profit Factor	2.09
Total Trades	120.00
Total Winning Trades	90.00
Total Losing Trades	30.00
Average Points per Trade	2.85
Percent Profitable	75.00
Largest Winning Trade	19.00
Largest Losing Trade	-37.00
Average Winning Trade	7.30
Average Losing Trade	-10.50
Ratio Average Win/Average Loss	0.70
Average Trade	8.10
Max Consecutive Winners	13.00
Max Consecutive Profit	96.00
Max Consecutive Losers	3.00
Max Consecutive Draw Down	-45.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Even this is only a small sample of this phenomenon I will explain in detail how we develop systems based on this in the Chapter 7... “Systems Development”

When we look at figure 47 we can see that the 3-month highs for March 2004 has provided resistance for 9 days and on the 10<sup>th</sup> we have a breakout, this breakout occurs on the day of expiry of the futures contract.

**It is important to understand what can occur when a contract expires. The Spot contract will move into the future contract, because this future contract will normally trade at a premium to the current Spot, there is a tendency that around expiry or 1-2 days later the SPOT will match the future contract in Price. Because Price is normally trading above any dynamic extreme, there is more of a chance of a breakout occurring. You will see this phenomena occurring always around the expiry.**

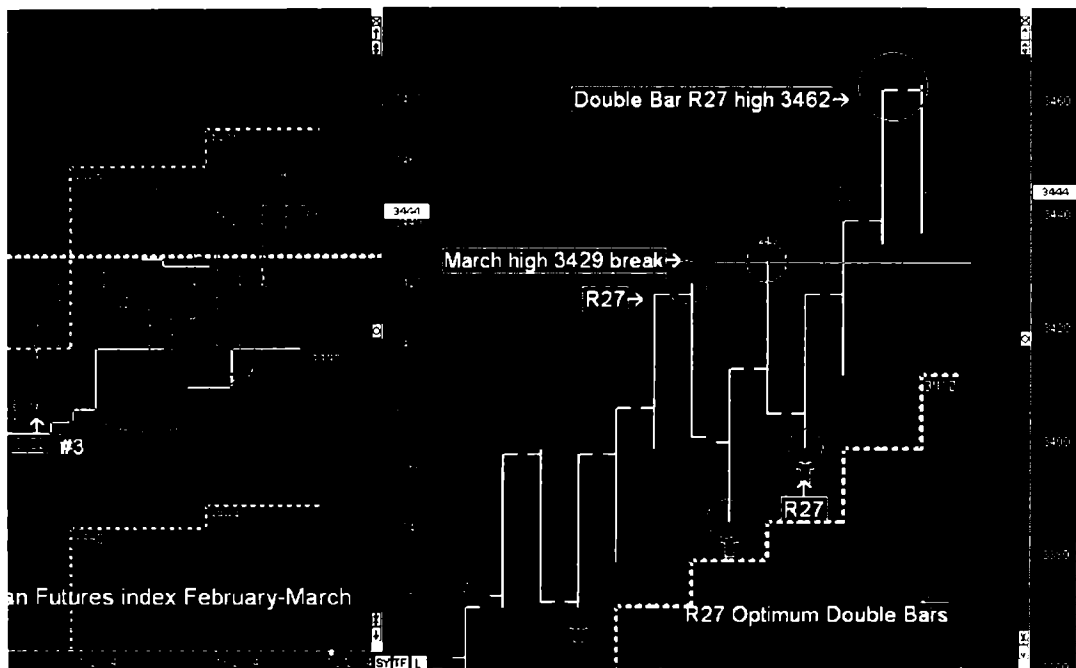


Figure 47.

So we have a break of the March highs, our next target on the break of 3429 is the 3-week highs of 3471 because we are looking for our next timeframe based on the 3-period dynamic ranges. We also need to remind ourselves price can remain outside these 3-month highs of 3429 until the next month beginning in April, and in fact prices have more of a chance of heading towards the new dynamic highs for April, A new all time high for the stock market.

When we have a look at the chart on the right we can see that the break of 3429 and the double bar completes at 3462, at the 27 point move high before we see a pullback. The pullback is now supported at 3438 because of the weekly pivot highs. This can support price until the completion of the trading week.

## **Trader objectives.**

Range Bars are a unique way of looking at the market and clarifying the market structure because it removes TIME and Price. We remove the notion of price because we are taking into account the gaps in the price structure, so we are incorporating levels in the market where no trades have actually occurred. This removes noise and gives a trader a view of the market being less random in nature and more statistically sound.

Statistically sound because each bar would need to complete in direction of the trend based on the 3-period cycle, so if we have defined an 'Optimum Range' a trader can develop systems based on the filter ranges with clear and precise profit objectives. Range bars help define any double directional movement thus helping the odds swinging in favour of the trader each and every day.

The movements have more clarity but traders need to be reminded, the movement of price will still be determined by TIME. TIME will still define the trends, TIME will still define resistance, and TIME will still define support. Range bars only help a trader define statistical profit objectives based on the Statistical movement of Price over TIME, thus completing the Optimum Range.

Whatever the timeframe and whatever the price action a trader is reading, each trader should now have clear 'models of expectations' based on probable moves using TIME, and using the optimum range bars using the same principles of cycles. This and everything else within the book should provide any trader with an edge and more importantly swing the odds in our favour each and every day.

The next chapter moves in statistical trading based on the sequence of data of each day based on precise set-ups of the past 5 days and is geared towards the intra-day derivatives trader.



## Chapter 5.

### Sequential Data and the Single Cycle Day.

Derivative markets have a natural flow to them, now whether this is due to the flow of buyers and sellers or from the function to organize itself through the use of computer-generated systems is debatable. The more time you spend in the market place the more time you will see the same patterns occurring, and the closer you look they will occur usually in the same areas of past data. We know the market is dynamic, we also know the market moves in waves and these smaller waves inside the larger cycles occur so frequent to even suggest that the market is random.

There has been a lot written over the years on short-term trading, along with fancy charts, lagging price indicators and definitions, they continue to deliver a false sense of making trades look easy. Waiting for these all-important set-ups that we have read in books using lagging techniques whether it being a candle-stick chart or a stochastic crossing a moving average, the trader is still trading the past without any probable future outcome. I have had arguments with other traders about 'probability' and they'll always favour the view that the probability on any trade will always be 50%. I just don't believe that is the case. If the markets have moved beyond the notion of price being facilitated in the market between two parties, to the facilitation of Price over TIME, then there has to be a statistical edge of past data whether we like it or not.

Most traders need to find an edge! That edge in my opinion, is trying to determine the mathematical sequence of past data and the probability of the market rotating and extending within each TIME cycle. It is fine for large institutional traders to dismiss this type of trading, as in most cases they will trade using automated systems with deep pockets, but for a small retail trader they don't have the luxury of deep-pocket accounts. We have seen throughout this book, whether it is the highest TIME cycle or the intra-day cycle, the Market will follow the path of TIME, statistically rotating towards the central zones and then extending onwards towards the outside pivot ranges as each new Time period begins. Using Range bars helps simplify the noise because all traders can easily define price action and profit objectives based on the optimum range within the market structure.

*How do traders find the edge when viewing price action? Is identifying orderly movements in price the best method there is?*

A lot of traders will try and predict the next movement through the wave structure and then trade the visible patterns to their predetermined profit objectives, statistically they don't have an edge as traders still operate under the understanding there is a random distribution of wins and losses. Basically we don't know the sequence of our wins and losses or how much money the market is going to make for us on each winning trade.

The methodology of AMT follows the similar theory as any other wave analysis; the only difference is that, AMT trades TIME whereas most other methods in the market place will trade PRICE. The other big difference is that, statistically TIME will return PRICE to central points with high regularity whereas PRICE has no probable outcome on its own.

## **My thoughts.**

My favourite 'spin' on technical analysis is the Chaos theory. It has been twisted and turned by many theorists over the years, only for them to make a name for themselves whilst traders are left with a definition that makes no sense at all. Maybe it's just me, but the notion of 'chaos' in the market to describe the lack of trading patterns just doesn't sit well, and I always find that traders who use the Elliot-wave methodology will use the terminology the most. Their methodology is based on the textbook of precise Fibonacci waves of past data but sadly the markets just don't act that way. If the market structure doesn't follow the standard definition in terms of their methodology then wave-traders will introduce 'Chaos Theory' to define price action that doesn't conform to the classic patterns that they believe should come naturally. The main problem with developing any mechanical automated trading system based on wave theory, is the inability to distinguish when it is 'chaos' and when it is not, when does one wave end and when does the next begin, whilst the many wave-traders I have spoken to over the years are so fixated with the markets functioning in a non-linear way that they prefer themselves not to get bogged down trying to formulate automated trading systems. So for waves-traders trading Price structure alone, their edge is no more than any other method that exists in the market place. There is no statistical edge of Price completing the natural wave other than a 50% probable outcome.

The market place as many would know is a place where buyers and sellers come to hedge and protect themselves whilst others speculate to make a dollar. But many believe that price action is the function of crowd psychology and this makes it all the more random in nature and harder to predict. What would happen if we believe this isn't the case, or let me put it another way, what if we found that these organized markets statistically did the same thing within each sequence of past data due to the saturation of computer systems used by large hedge funds. Through my observation over many years that market makes all these precise moves with high regularity that I can't believe that the price action is a random occurrence. The only thing that is random is our distribution of wins and losses.

## **Sequential-TIME-Analysis.**

What if we think along the lines of the market place being organised by computer generated systems to make sure it functioned properly, remember most derivative markets are a by-product of a main entity or a group collection, for example Index futures. If these non-linear derivative markets are being organised to function properly through the use of computer generated systems then statistically you would think that they would behave in an orderly manner and more importantly, there would be statistical and repeatable patterns occurring all the time within the market structure.

We have seen in the earlier chapters of AMT how the market moves with the path of Time, continually rotating and extending as each cycle of TIME begins and ends. These precise movements within each Time parameter just can't be random in nature. If these non-random events are always occurring with high regularity, can we as traders find a statistical edge of using TIME so we can predetermine the trading day before it actually begins. So for any day-trader trading an organised derivative market they shift the odds statistically, thus knowing before the day begins whether their trading day will end up being profitable or not. If that is possible, then the random distribution of wins and losses then statistically swings in our favour.

Sequential analysis is well suited for day trading because an expected scenario is implied. Most sequential analysis is based on the open-close relationship of past data and how we trade based on the open auction to the previous day or sets of days.

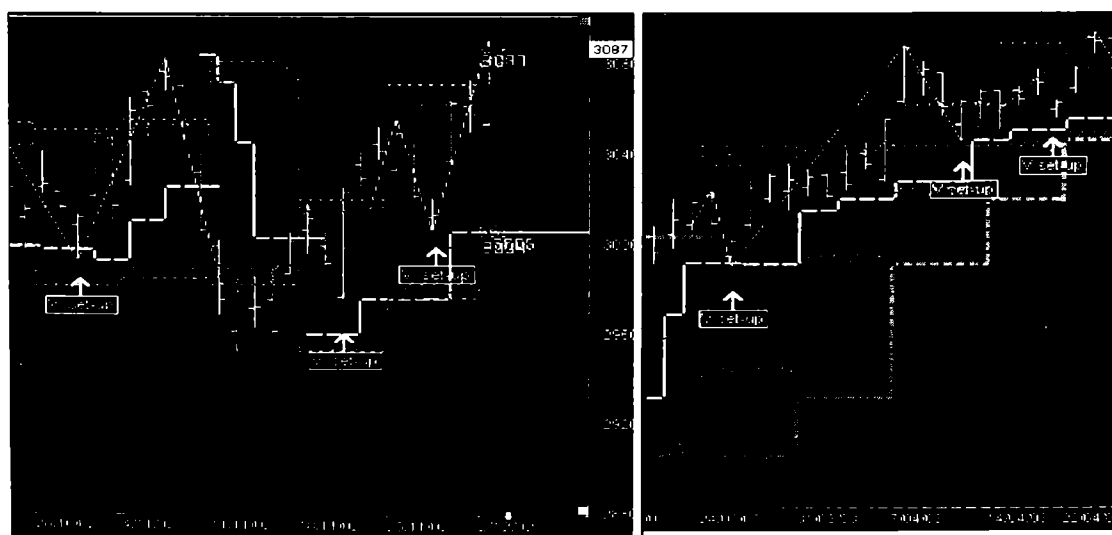
The idea of using sequential data is to find the probability of opening and closing price action within the current days trading. So for any day trader thinking of trading an open position, the statistics behind the probable action based on the past data would be a tremendous advantage to say the least. If we knew in advance that today would behave in a certain manner then all we have to do is change our discretionary approach to a more systematic approach.

AMT provides the necessary tools and statistical information based on 24 different set-ups.

*\* Examples of some of the sequential set-ups.*

#### **V Set-up. Opens below range. Daily 50% is in between 3 day over 5-day balance**

The V Set-up is the set-up that occurs the most frequent of all the 'in-between cycles' and occurs at the bottom range of the 5-day cycle. Statistically, the V set-up will be a buy day; rising from the 3-day dynamic lows, where the up-move could be a slow rise into the previous days pivot lows and a higher open the next day.



**Figure 48.** Daily charts of the Australian futures index (SPI) 2002-2003.

Sequential trading is intuitive trading in a nutshell. Intuitive trading is pre-empting the market action, knowing before the outcome whether the odds of this trade will be profitable or not, whilst most price based systems that are systematic in approach are still trading without any probable outcome. A trader using sequential data must perceive the correct conclusion; each set-up works if and only if the trader trades the forecastability of that particular set-up.

### Example: Five days using 'Single Day cycle'.

Edited posts before each opening of the trading day from 3<sup>rd</sup> to 9<sup>th</sup> July 2003.

#### **AMTrade Group**

Posted - 07/03/2003: 08:47:29

#### **SPI 3rd July 2003.**

Australia  
130 Posts

Today looks like it will be opening above the daily pivot highs, the set-up is a **U set-up**, and looking at statistical data today could end up closing lower than the open.

A failure of 3058 and move back under 3051 and we have the daily 50% level as our Lower reference.

AMTRADE GROUP.

#1. The chart on the left shows before the market open and the chart on the right shows the close of the day, the day followed the SDC probability of closing lower.

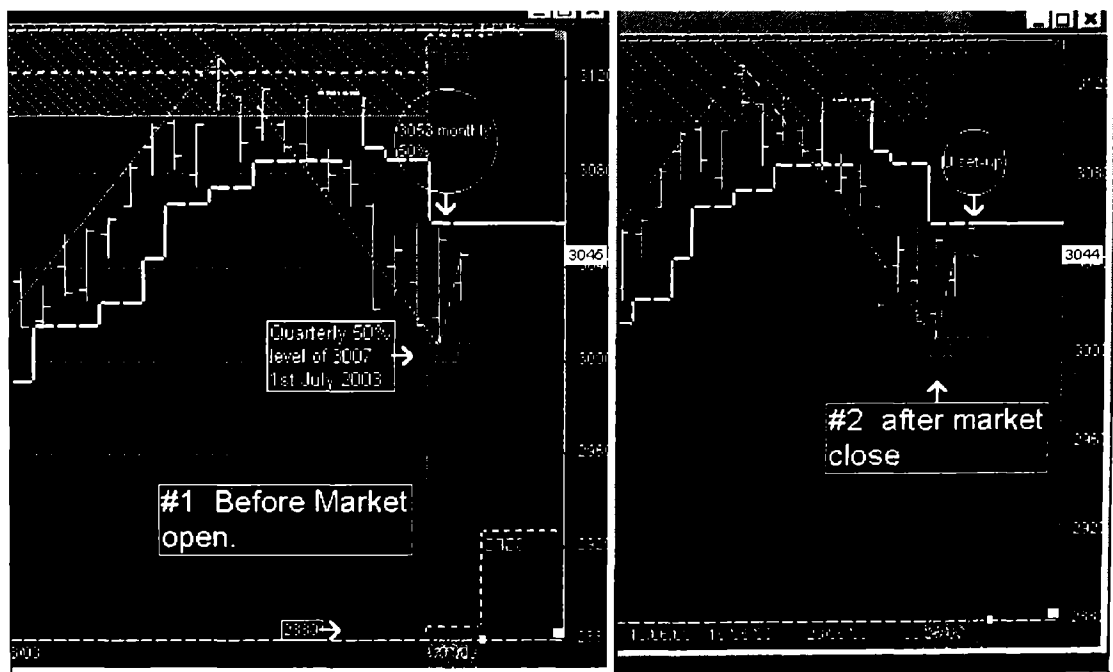


Figure 49

Australia  
131 Posts

Today's opening 30 minutes should give us an idea how our market will be trading as an open under the daily lows put the market under pressure.

An open below the daily lows is an **M set-up**, something that isn't bullish.

Trend will be defined by 3038, **using this M set-up I'll be looking for any trend squeezes around 2.50pm.**

AMTRADE GROUP.

#2 The chart on the left shows the daily pre market open, and the chart on the right shows in the 50-minute intra-day chart and what actually occurs during the day; the market opened lower below 3038 and was under pressure for most of the trading day until 2.50pm where price rallied from the 2.50pm lows reversing the entire trading day.

AMT using SDC predetermined the entire trading day before the market had opened.

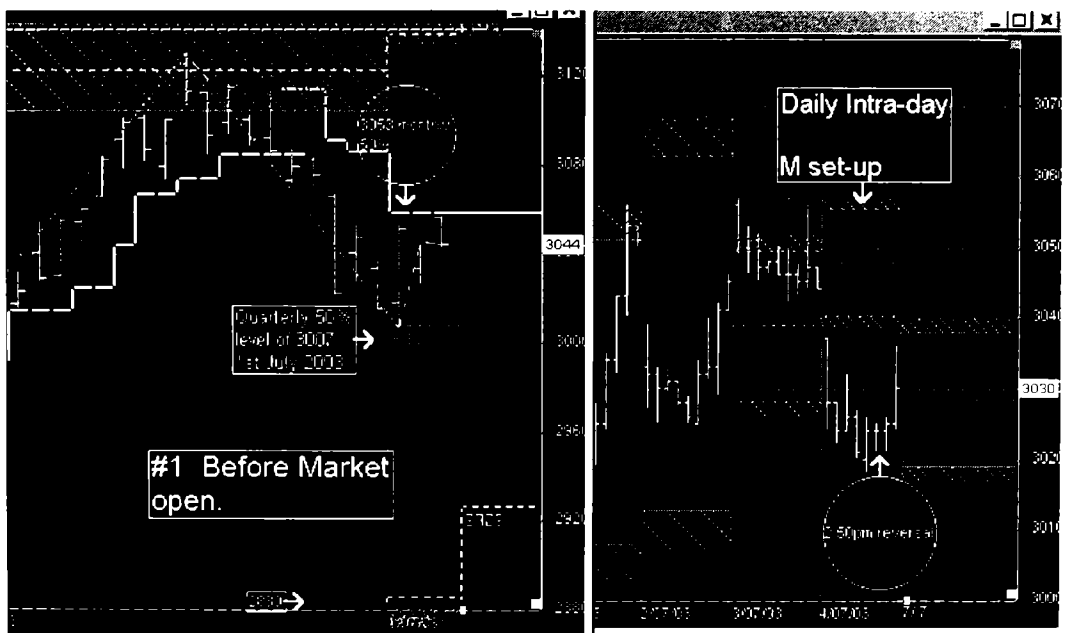


Figure 50.

**SPI 7th July 2003.**

Australia  
132 Posts

The **C set-up** usually sorts itself out within the first 50-minutes whether it is a trending day **down**, or a rotation day within its own daily pivot ranges, keeping in mind the weekly 50% level of 3031.

Stats on the day-type are 50%, so I have no Statistical-bias for the trading day.

AMTRADE GROUP.

#3 Below shows the pre market open and the chart on the right (50minute charts) shows the how the day unfolded, we can see a 50 minute rally and then rotation back towards the central zones of 3031. This scenario was once again pre-determined before the market opened.

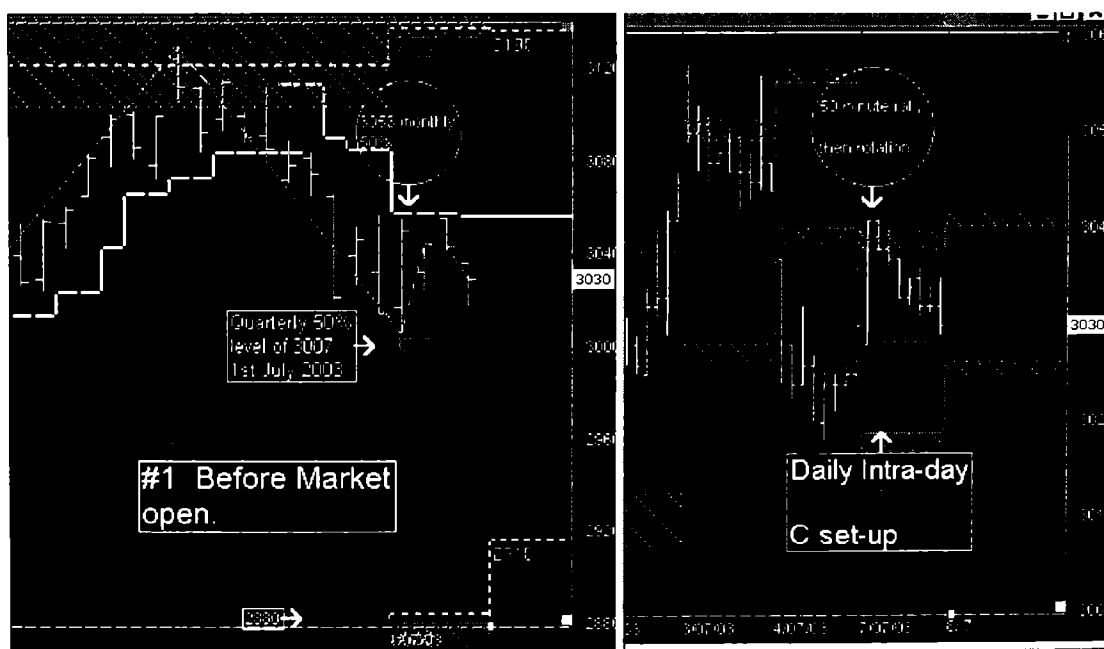


Figure 51

**SPI 8th July 2003.**

Australia  
133 Posts

**T set-up** is a rare sequential set-up but can have a bias to move back towards the central zones from a higher open, this set-up has a bias to close either way so the last 100 minutes of trading will be something to look for.

AMTRADE GROUP.

#4. Shows the actually trading day of the daily charts and also the 50-minute intra-day Charts; we can see that it was a large down-day selling back to the central zones, and also another 'sell' from the last 100 minutes of trading from 2.50pm into the close.

We had pre-determined that we were not going to be trading any long positions and there would be another possible trade from 2.50pm.

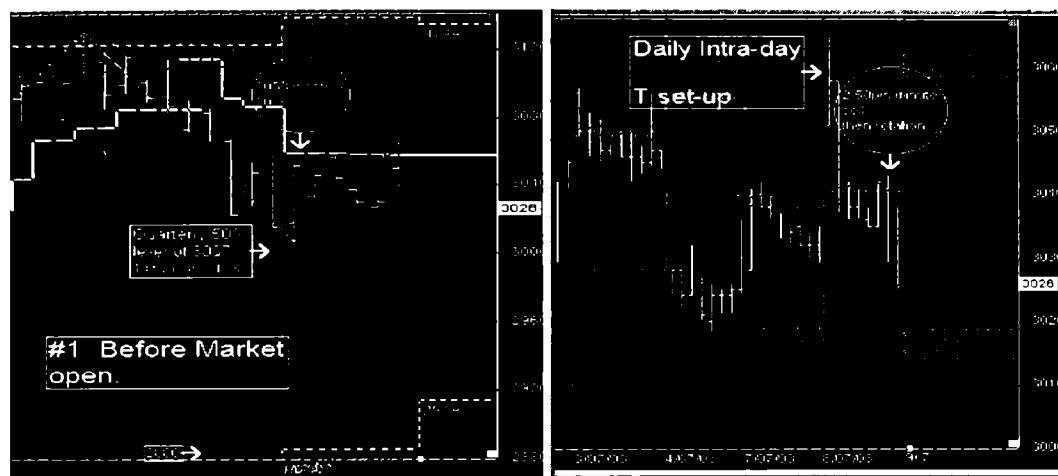


Figure 52.

## AMTrade Group

Posted - 07/09/2003: 07:38:48

SPI 9th July 2003

Australia  
134Posts

Today is a **D set-up**, statistically a (rotation) down day, with a 2.50pm reversal 'buy' Cycle.

AMTRADE GROUP.

#5 Lastly we have a D set-up where the bias is for the trading day to be a rotation to the downside with a 2-50pm reversal, we can see that the market had remained subdued for most of the trading day before we see another 2.50pm reversal back towards the central zones once again.

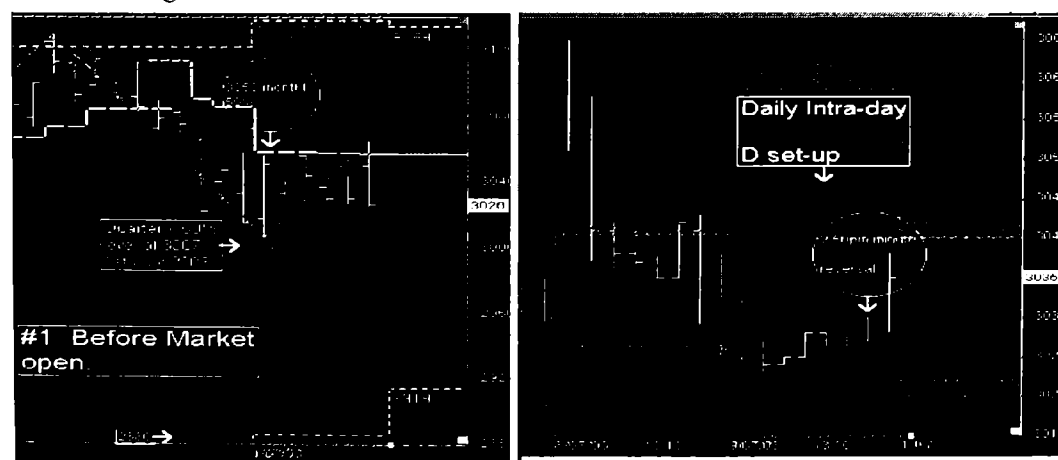


Figure 53.

As you can see each set-up over the five continuous days behaved in a certain way even though I gave my thoughts before the market actually opened. The market has gotten to a point that each of us can make highly accurate forecasts without fear, and hopefully trade them in a systematic fashion. Whether you discretionally trade these set-ups or use them in conjunction with your own systems is up to you, however I recommend you do the latter because of the positive expectancy of dollar reward that you should be operating under. And don't dismiss the previous chapter regarding the 9-point reverse bar moving into the 27-point optimum range either. Through my testing over a number of years this is a very valid strategy you can use.

**Sequential trading is the route to successful trading, as it is part of the game plan and allows the trader to approach trading systematically and therefore a trading plan that they can stick to. If one set-up has a high probable outcome then success can be ensured if the trader follows it, and along with the use of TIME, 3-day cycles and optimum Range bars, the Day-trader has turned a 50% probable outcome that many believe only exists in the marketplace to an edge with a tremendous advantage.**

Before I move into Sequential and Statistical Probability trading I want to show how non-linear markets statistically function. Peter Steidlmayer of Market Profile fame, found that there is a high statistical correlation in any organized market place Price will make its way back towards the 'mean' of the most traded areas, or as he called it, *the value-added area*. Market profile concept of trading is using the most traded area or *the value area* as an attraction and the standard deviation of the range as a guide. The methodology is based on visualizations, as Peter Steidlmayer the developer of Market profile once described his theory, *three basic relationships hold the key to understanding the nature of markets. These relationships take us from the past to the present and into the future, thus giving us an insight to the markets.*

Market profile uses the concept of standard deviation, also drawn from the science of statistics. The standard deviation is a way of measuring how far values in any group of numbers vary from the mean. In any normal distribution, values within a given number of standard deviations from the mean will occur with a predictable frequency. Normally, about two thirds will fall within one standard deviation from the mean and 95% will fall within 2 deviations of the mean. The theory of Market Profile is based on Price over Time but what if we reverse the concept, and instead of using the standard deviation and the 'mean' of Price as Steidlmayer did, we use the standard deviation and the 'mean' of TIME and disregard Price altogether.

Recently I came across a website from a European based trader who posted this on his website.

**“Market psychology can explain how the crowd could react dramatically but in details it does not explain everything, for example intra-day price actions during the so called Globex electronic market where there are only a few**



participants and especially market makers even when regular trading is closed whereas Globex goes on. Nevertheless the behaviour has the same pattern and our equations using only past data and not real time has the same power of prediction during the Globex session. This and other observations drive us to search for a more rational explanation than psychology of the crowd.

"The model of the Dow theory which says that's there is a group of people that initiates reversal of the market at the top or bottom so that speculators can then amplify the trend before the crowd enter the market during the distribution phase. Dow theory could just be an allegory - as is Prechter's socio-economics of the crowd - if there is anything else behind it. But we discover something else: there is a mathematical model that optimises the gains of the first group (the initiates) against the others (the vast majority of speculators and the crowd) so that economically it is in fact a process of a *negative distribution* of wealth. One of the consequences is the extreme variability of volatility, which is the fundamental mechanism for whipsawing short-term traders, or push them out of their scale intervention, in this case if they do not cut their losses they will become under capitalized and be soon out of the game" ...(Harry Trader 2002).

The reason why I have taken Harry Trader's words is that, I believe the exact same thing. The professionals are out to take the money of the under-capitalised traders and trading the 50% probability scenarios that most trading methodologies adhere to, just won't cut it in derivatives. Retailer traders need to find a statistical edge on every trade they take!

Finding that statistical edge, we need to prove that the market returns to the central points of TIME, we need to prove statistically that TIME is more important than Price, and lastly, we need to have statistical information that provides a *window into the future* so we can swing the random distribution of wins to our favour. It's fine to have a methodology and an understanding of the Market Path based on the mathematical sequence of TIME, but now we need to provide statistical data on how the past data will repeat itself continually. This is the next step in **Analytical Market Trading**.

Firstly, lets take a look at the concept Peter Steidlmayer's methodology of Statistical data, and introduce the concept of using TIME instead of Price. *The reason why she trades against all trends is that, she expects prices to rotate back to some central point. If the market spends more time rotating within itself and making extended moves as time moves forward then combining the two concepts would provide a very robust methodology. The combination of the two has the potential to form a predictive model with high probability of success.* (Chapter 1 AMT.)

By combining the two forms of analysis to form one predictive indicator the trader has the potential to form a robust methodology of statistical trading and/or, a robust automated system.

*So what is the indicator, and how can one indicator form the backbone of any organised market?*

**\*Autoregressive intergraded moving averages, or the regressive ‘mean’ of past data.** It is a methodology that determines how the influential the previous time period is in the next Time period. It is a form of looking at the seasonality of the past, and using SINE waves to predict the future period with past statistical data.

The ‘Least Square’ uses the function of statistically taking the past to project the future. It is based on the 50% and the standard deviation of the past timeframe using statistics. Similar to what Peter Steidlmayer tried to accomplish with Market Profile, the difference between the two is that, one is based on past PRICE ACTION, something that is inherently late, whereas, the LEAST SQUARE is based on TIME, something that we know will occur in the future, so in fact, it will project the area where Price will statistically move to in the next TIME frame. If we believe in the *organised market theory* then statistically price will want to return to the mean of the standard deviation. The ‘Least Square’ measures that mean. Basically, price follows the ‘mean’ like a magnet but once the *price* and *mean* come together within the timeframe, price will be rejected towards the *mean* in the next timeframe, or pushed towards the extended range. You will notice like a duck is to water, price follows the ‘mean’ and not the other way around. The Least Square statistically attracts price. Now understanding the concept of the standard deviation is about as difficult as it is using it. The only redeeming factor in the theory is, and as described in the above summary, *Price* likes to have a predictable frequency and through the science of statistics there is a high correlation of markets behaving in a certain way.

The mathematical calculation for the least square indicator is as follows...

$$y = a + bx$$

$$a = \frac{\sum y - b \sum x}{n}$$

$$b = \frac{n \sum (xy) - (\sum x)(\sum y)}{n \sum x^2 - (\sum x)^2}$$

X = current period  
N = total of periods

Figure 54 is an example of the *least square* indicator on a chart, it shows the 'mean' of the past 5 days of trading, basically it is the 50% standard-deviation of TIME over the past 5 days of trading. As you can see it is an erratic indicator and visually doesn't provide anything magical to use as a stand-alone indicator.

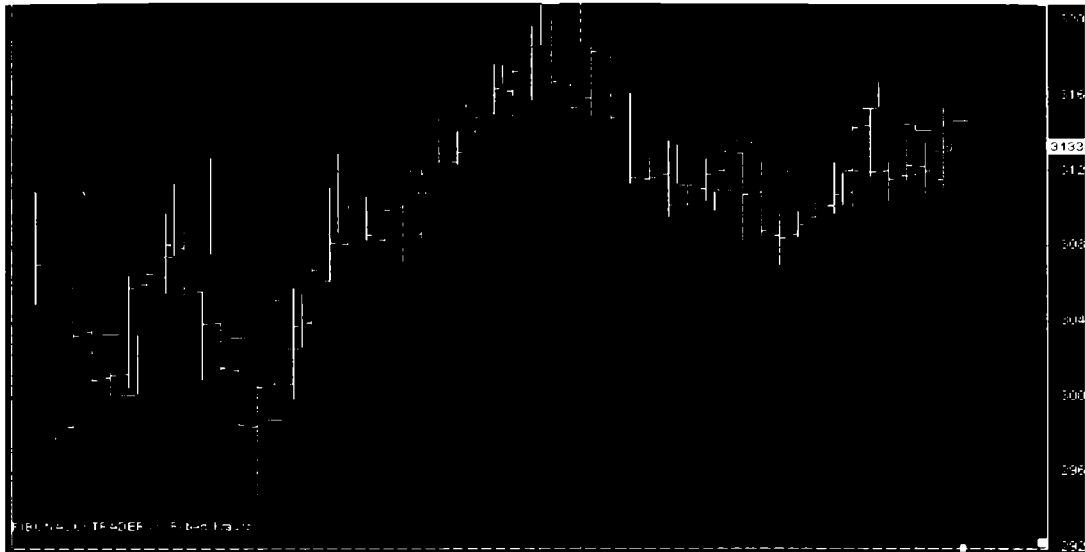


Figure 54.

Figure 54 displays the least square (LS) of the 5 days. If you look closely at the opens you will notice how the market tries to chase the mean, nearer the 50% ratio on open of the day price will be rejected and pushed away, the further away and price will statistical try and move back towards the central zone. Below is a simple system to test the idea of the market rotating towards the central point of TIME.

Figure 55a, is a black box system using only the LS of 5 days. The system is based totally on the concept of price reverting to the mean; the system automatically inverts the open position towards the mean of the past 5-days of trading. Once the day closes, it will either exit the open position if the day has closed on the opposite side of the central point, or continue the open position until the close occurs over the central point.

The system trades **without any stops in place and is open to all market forces and is not filtered in any way. This goes back to the crux of my theory and the best way of trading intra-day derivative markets; trade against all trends because the market is non-linear.**

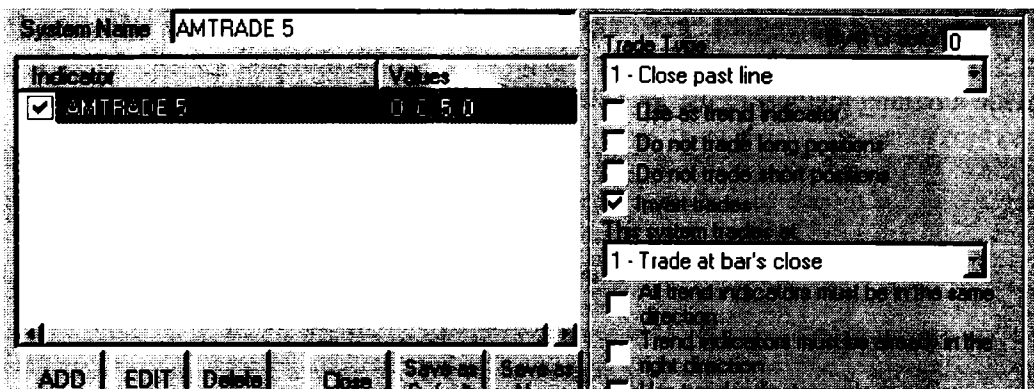


Figure 55a.

To find that statistical edge, we need to prove that the market returns to the central points of TIME, we need to prove that statistically, TIME is more important than Price and lastly we need to have statistical information that provides a *window into the future*.

Can the *least Square* as a stand- alone indicator provide the proof we seek?

Many traders know that any derivative market over the course of 4 years of trading in an environment that statistically has a failure rate over 90% will be enough to test this indicator. The test data is of the 24-hour market of the SPI over a 5-year period from January 2001 until October 2005. The system has no stops other than TIME.

It will only enter the market at the beginning of the trading day and automatically exit at the end of the trading day. It has no interest in PRICE whatsoever. TIME is the only thing that matters.

Performance Results for spi 24 sycom 01/12 250- 500- D System lea	
From 25/04/01 04:10 to 31/12/01 09:40	
Gross Profit	1,340.00
Gross Loss	-725.00
Net	615.00
Total Trades	68.00
Total Winning Trades	40.00
Total Losing Trades	28.00
Percent Profitable	58.82
Largest Winning Trade	266.00
Largest Losing Trade	-78.00
Average Winning Trade	33.50
Average Losing Trade	-25.89
Ratio Average Win/Average Loss	1.29
Average Trade	30.37
Max Consecutive Winners	5.00
Max Consecutive Profit	322.00
Max Consecutive Losers	4.00
Max Consecutive Draw Down	-129.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Figure 55b.

Figure 55b is the results of 6 months of open trading from April 2001 to December 2001 on the 24-hour market using the one indicator, LS. The system as described above, reverts back towards the mean using only TIME as an entry and as an exit. The system returns over 50% and more importantly it shows that the concept is profitable.

Figure 55c, shows the returns from January 2002 until September 2002, and over the next 8 months the exact same system continues to show a better than 50% return. Again it shows a profitable return.

Figure 55d continues into the new contract of the SPI from September 2002 until March 2003, and again we can see a high correlation of statistical data matching the previous 6-month period.

<b>Performance Results for spi 24 sycom 02/06 250- 500- D System lea</b>	
<b>From 26/01/02 00:00 to 17/09/02 08:20</b>	
Gross Profit	971.00
Gross Loss	-744.00
Net	227.00
Total Trades	69.00
Total Winning Trades	39.00
Total Losing Trades	30.00
Percent Profitable	56.52
Largest Winning Trade	98.00
Largest Losing Trade	-71.00
Average Winning Trade	24.90
Average Losing Trade	-24.80
Ratio Average Win/Average Loss	1.00
Average Trade	24.86
Max Consecutive Winners	5.00
Max Consecutive Profit	148.00
Max Consecutive Losers	4.00
Max Consecutive Draw Down	-179.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Figure 55c.

<b>Performance Results for spi 24 sycom 02/12 250- 500- D System lea</b>	
<b>From 5/09/02 08:20 to 31/03/03 09:50</b>	
Gross Profit	853.00
Gross Loss	-567.00
Net	286.00
Total Trades	48.00
Total Winning Trades	27.00
Total Losing Trades	21.00
Percent Profitable	56.25
Largest Winning Trade	108.00
Largest Losing Trade	-64.00
Average Winning Trade	31.59
Average Losing Trade	-27.00
Ratio Average Win/Average Loss	1.17
Average Trade	29.58
Max Consecutive Winners	4.00
Max Consecutive Profit	170.00
Max Consecutive Losers	4.00
Max Consecutive Draw Down	-107.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Figure 55d

Performance Results for APSPOT24 D- W- Q System least From 3/21/2003 00:00 to 10/3/2005 00:00	
Gross Profit	2,530.00
Gross Loss	-1,513.00
Net	1,017.00
Profit Factor	1.67
Total Trades	162.00
Total Winning Trades	97.00
Total Losing Trades	65.00
Average Points per Trade	6.28
Percent Profitable	59.88
Largest Winning Trade	116.00
Largest Losing Trade	-96.00
Average Winning Trade	26.08
Average Losing Trade	-23.28
Ratio Average Win/Average Loss	1.12
Average Trade	24.96
Max Consecutive Winners	7.00
Max Consecutive Profit	222.00
Max Consecutive Losers	5.00
Max Consecutive Draw Down	-97.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

**Figure 55E.**

Over the extended 4-year period, this simple system of reverting back towards the mean of the past 5 days has statistically provided an edge over 58.19%. Remember the system has been open to all market forces and trades without any stops or filters whatsoever. At this stage I'm not concerned about the Profit and Loss factor, all I wanted was to find some statistical phenomena in the market that put me above the 50% edge, and this indicator does that. In my opinion this proves that the market does in fact rotate within itself as it dynamically moves forward and should be the backbone of any strategy or system we develop.

Past results are not a forgone conclusion for future results, but ever since the market has moved from the floor to full automation we can make the conclusion that the market has evolved from the random and 'chaotic' nature that many describe it as, to a market that statistically rotates within itself as TIME moves forward. It also makes the conclusion that TIME is more relevant than PRICE, and lastly, the 5-day sequence will now be the backbone of any system we develop whether it being sequential statistical data or a fully automated system.

## **Sequential Data and the Single-Cycle Day.**

*If these non-linear derivative markets are being organised to function properly through the use of computer generated systems then statistically you would think that they would behave in an orderly manner and more importantly, there would be statistical and repeatable patterns occurring all the time within the market structure.*

Sequential analysis is well suited for day trading because an expected scenario is implied. Most sequential analysis is based on the open-close relationship of past data and how we trade based on the open auction to the previous day or sets of days. One of the first books written on sequential trading was back in 1921 by a market trader named William Moore, titled, *Wall Street, Its Mysteries Revealed, Its secrets exposed.*

Sequential trading isn't new when it comes to analysing market action. But in today's choppy environment, these books of yesteryear would more than likely struggle as most of the data was based on Price with little reference to TIME. The idea of using sequential data is to find the probability of opening and closing price action within the current days trading. So for any day trader thinking of trading an open position, the statistics behind the probable action based on the past data would be a tremendous advantage to say the least. If we knew in advance that today would behave in a certain manner then all we have to do is change our discretionary approach to a more systematic approach. There is no point in fading the trend on a gap open, if statistically the day will continue to trend with the primary 3-day cycle.

As you have noticed in this chapter, I have made no reference to the things we have learnt in the previous chapters regarding the higher TIME ranges or 3- period cycles. The only reference we have used is the rotation of PRICE over TIME.

**The sequential analysis of day trading is based on the open of the trading day, in relation to the past 5-days of trading.** The reason being is, the past 5-days of trading already proves that statistically this period is the optimum timeframe to use. Secondly, we use the 3-day cycles as our next reference point. We saw in earlier chapters that the market moves in 3-day dynamic cycles, extending and rotating as Time moves forward. And lastly, we use the previous single DAY Pivots as our open relationship to determine the trades we undertake.

Sequential data is based on the sequences of balance points and where the market opens in relation to this sequence. We use 3 different balance points to determine each SDC.

1. The 5-day balance point, this is calculated by the math of  $H+C+L/3$ .
2. The single daily balance point and range. (Daily pivot range  $H+C+L/3$ )
3. Lastly the 3-day balance step. This is different to the balance point as the balance step takes the past 3 individual daily balance points and makes an average, this will provide a 'step' of the previous 3 daily balance points.

These three different balance points will determine the open to close relationship; the statistical data will then provide 24 different set-ups. The position of each central point will vary each day. The open in relation to these central points and extremes will determine the course of action we will undertake.

## **24 Sequential Patterns based on the open to close relationship of 5 days of data.**

There can only be 6 different patterns that can occur between the three central points of the daily, 3-day and 5-day, however where price opens in relation to the previous Daily range, that is, above or below the daily midpoint (50%) or above/below the daily range pivot ranges, the 6 cycles then become 24 set-ups of Sequential patterns.

Below is a table of the 6 cycles and the 24 set-ups. The **Single-Day Cycle (SDC)** as I have called it, will normally follow the same statistical pattern as previous set-ups as long as past data and higher timeframes allow it to.

**SDC Open each day in relation to the position of balance points and probability outcome**

<b>A</b>	<b>OPENS BELOW DAILY 50% WHICH IS ABOVE THE 3 DAY OVER 5 DAY 50%</b> Sell day bias from daily 50%, with late trend squeeze from 2.50pm
<b>B</b>	<b>OPENS BELOW DAILY 50% WHICH IS ABOVE THE 5 DAY OVER 3 DAY 50%</b> Stats mixed depending on 3-day cycle day normally will try rotate upwards early towards the daily 50% level before moving with cycle trend
<b>C</b>	<b>OPENS BELOW DAILY 50% WHICH IS BELOW THE 3 DAY OVER 5 DAY 50%</b> Opens at bottom of 5-day cycle, watch first 50 minutes for rotation back towards daily 50%, breaks daily pivot lows bearish
<b>D</b>	<b>OPENS BELOW DAILY 50% WHICH IS BELOW THE 5 DAY OVER 3 DAY 50%</b> Sell day bias with late trend squeeze from 2.50pm
<b>E</b>	<b>OPENS ABOVE DAILY 50% WHICH IS ABOVE 3 DAY OVER 5 DAY 50%</b> Normally a tight trading/stalling day near the 5-day highs and well supported.
<b>F</b>	<b>OPENS ABOVE DAILY 50% WHICH IS ABOVE 5 DAY OVER 3 DAY 50%</b> Opens near 5-day highs and early fading opportunities back towards the daily 50% level, after this price can do two things, continue lower or make new highs once again after the initial move lower as intra-day cycles determine the outcome
<b>G</b>	<b>OPENS ABOVE DAILY 50% WHICH IS BELOW 3 DAY OVER 5 DAY 50%</b> depending on 3-day cycles it can be a tight trading day but a bearish cycle would favour a further move lower
<b>H</b>	<b>OPENS ABOVE DAILY 50% WHICH IS BELOW 5 DAY OVER 3 DAY 50%</b> A wide rotation day using the daily pivots
<b>I</b>	<b>OPENS ABOVE DAILY HIGH PIVOT DAILY 50% WHICH IS ABOVE 3 DAY OVER 5 DAY 50%</b> Depending on 3-day cycles and weekly pivots on direction of the day, above weekly and bias to move higher and visa-versa
<b>J</b>	<b>OPENS ABOVE DAILY HIGH PIVOT DAILY 50% WHICH IS ABOVE 5 DAY OVER 3 DAY 50%</b> Normally rallies in the first 100 minutes of trading before stalling and then selling off from 2.50pm
<b>K</b>	<b>OPENS ABOVE DAILY HIGH PIVOT DAILY 50% IS BELOW 3 DAY OVER 5 DAY 50%</b> Upside bias and potential trending day for most of the day
<b>L</b>	<b>OPENS ABOVE DAILY HIGH PIVOT DAILY 50% IS BELOW 5 DAY OVER 3 DAY 50%</b> Tight rotation day type around the 5 day 50% level

**Table 1.**

Before I begin with each sequence we need to be reminded that for statistical probability to occur we need for market action to be dynamically correct. These set-ups have no relevance to any higher timeframe, market path, or any 3-period cycle. These set-ups are independent of what has been described in the previous chapters, so when trading statistical probability we need to make reference to the previous chapters as past data will determine the range days and each SDC will only behave in a similar way if TIME allows it to, as described in the previous chapters of Analytical Market Trading.

<b>M</b>	<b>OPENS BELOW DAILY LOW PIVOT. DAILY 50% IS ABOVE 3 DAY OVER 5 DAY 50%</b> Depends on 3-day cycle, bearish and trend is down into 2.50pm before late squeeze. Bullish cycle and bias to move back towards daily 50%
<b>N</b>	<b>OPENS BELOW DAILY LOW PIVOT. DAILY 50% IS ABOVE 5 DAY OVER 3 DAY 50%</b> Depends on 3-day cycle, bearish and trend is down into close. Bullish cycle and use daily pivot lows as guide
<b>O</b>	<b>OPENS BELOW DAILY RANGE. DAILY 50% BELOW 3-DAY OVER 5 DAY 50%</b> Famous Larry Oops set-up and move back into daily pivot lows and can go higher. Expectation of a higher open the next day
<b>P</b>	<b>OPENS BELOW RANGE. DAILY 50% BELOW 5-DAY OVER 3-DAY 50%</b> Can go either way. Normal day type is trending use daily pivot lows a Risk guide
<b>Q</b>	<b>OPENS ABOVE DAILY 50%. DAILY IN BETWEEN 3-DAY OVER 5-DAY 50%</b> Rare day type, normal stalling/tight trading if bearish 3-day cycle. Bullish cycle has an up bias day
<b>Q+</b>	<b>OPENS ABOVE DAILY 50%. DAILY IN BETWEEN 5-DAY OVER 3-DAY 50%</b> Rare day type, normal stalling/tight trading if bearish 3-day cycle, but next day can be a N SDC. Bullish cycle has an up bias day
<b>R</b>	<b>OPENS BELOW DAILY 50%. DAILY IN BETWEEN 3-DAY OVER 5-DAY 50%</b> Rotation type day similar to the H SDC, use daily pivot ranges as guide
<b>S</b>	<b>OPENS BELOW DAILY 50%. DAILY IN BETWEEN 5-DAY OVER 3-DAY 50%</b> Early selling pressure but can rally into close and close higher from 2.50pm
<b>T</b>	<b>OPENS ABOVE RANGE DAILY 50% IN BETWEEN 3-DAY OVER 5-DAY 50%</b> Very similar to F SDC. Look for fade into the daily pivot highs and can go lower. Look for more trading opportunities from 2.50pm either way
<b>U</b>	<b>OPENS ABOVE RANGE DAILY 50% IN BETWEEN 5-DAY OVER 3-DAY 50%</b> Similar to the T SDC, however depends on 3-day cycle, bullish and can move higher into close.
<b>V</b>	<b>OPENS BELOW RANGE. DAILY 50% IN BETWEEN 3-DAY OVER 5-DAY 50%</b> Similar to the O SDC, however depends on 3-day cycle, bullish and can move higher into close, expectation of higher next day open
<b>W</b>	<b>OPENS BELOW RANGE. DAILY 50% IN BETWEEN 5-DAY OVER 3-DAY 50%</b>

**Table 2.**



Sequential data based on the open and the 5-day cycle will confront the trader before the open each and everyday. Knowing the statistics behind the open-to-close relationship is a tremendous advantage for any trader because their discretionary approach to trading then becomes more systematic in fashion. As will be shown in the following pages, knowing the statistical data behind the open-to-close relationship can only benefit the trader in maximising the trading potential for each and every day whilst minimising their losses using strict money management rules based on TIME and not Price. I want to remind traders that this is 'probability' and not a forgone conclusion for every SDC.

### **Intra-day traders.**

Because sequential data is directed mainly to the day trader trading futures markets, position and swing traders should not dismiss the information that will follow. Once the market path is known and we have a 'model of expectation' for price to make its way to some distant target then there shouldn't be any reason for longer-term traders to maximise the markets gyrations by using the SDC data.

*"Derivative markets should have a more probable and predictable outcome than before. If the unknown outcome of human action has been replaced by the probability of precise movements occurring within the market regularly, then we as traders should be able to maximize the trading potential that exists. If the market performs the same sequence of repetitive patterns based on past data, then the trader should become more systematic in their approach and maximize the unlimited trading potential that exists within the numerous timeframes. Knowing when these things will occur regularly has to be the closest thing to the Holy Grail that we constantly search for."*

Following are some examples using TIME, SDC cycles and the Optimum Range Bars.

Subject                      Spi for 02.03.04/bonds  
Posted                        02/03/04 11:23 - 134 reads  
Posted by                    Frank D  
Post #1593 - in reply to msg.

SPI, hitting resistance in early trading based on the 3-week period 3399

J set-up, statistically a close near its lows of the day, but most of that normally comes after 2.50pm, so that's how I'm treating our market today.

*This is post to members on a forum (Hotcopper) at 11.23am.* Price had trading around 3395 for most of the day until 2.50pm when statistically sellers appear based in the market after 2.50pm and closing near its lows (J set-up SDC). As a day trader I already had resistance defined by 3399 and the 3-week highs, an SDC of statistically being a down day, and probable target of 27 from today's highs. It was highly accurate, precise and a predictable forecast using Time, Price and the Optimum Range for that particular day within the market structure. The J set-up occurs at the top of the completion of the R27, and all we need is for the first 9 bar reversal to occur for our confirming Short. (Figure 56)

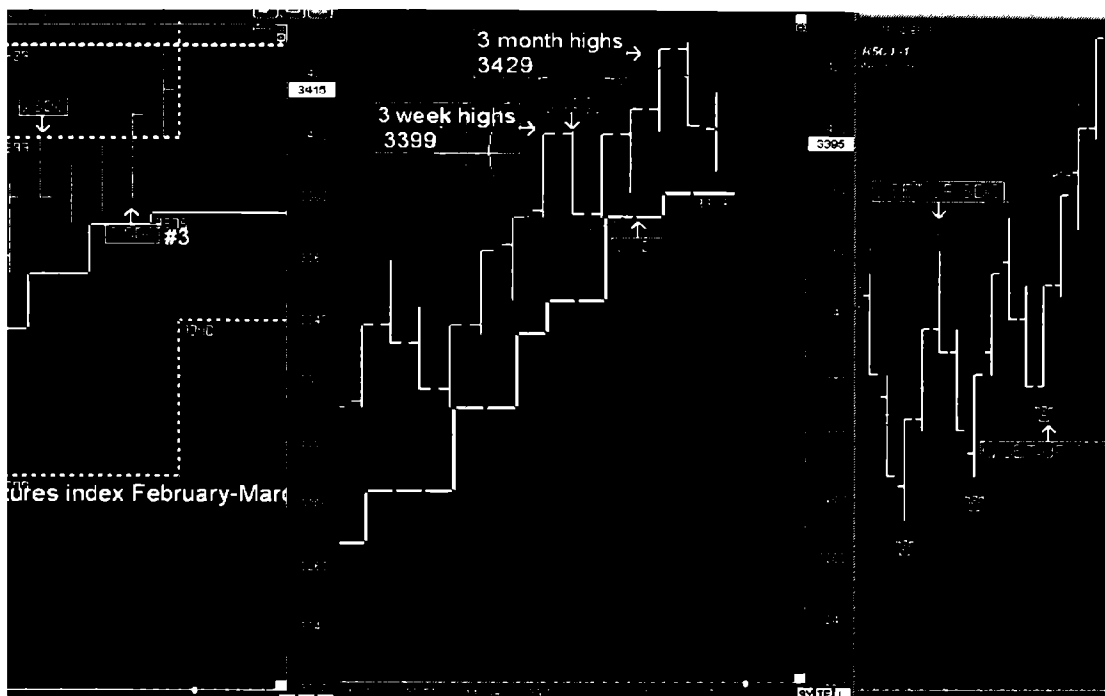


Figure 56.

Subject re: trading - 05/03/04 - Frankie  
 Posted 05/03/04 14:28 - 37 reads  
 Posted by Frank D  
 Post #1637 - in reply to msg.

The first 50 minutes at 10.40 has closed above 3399, this has changed the intra-day cycle to a BUY. The cycle begins from yesterdays lows and price at 2.00pm TIME & Price has met, hopefully pushing prices higher into the close based on the SDC of Q and a higher close.

So at this stage, I would have to favour a move higher from now with the R27 points to 3411.

This post was nearing 2.50pm in the afternoon and trading around 3390, just below the resistance zone of 3399 (Figure 56 again) Price has failed already on 3 different occasions this week. But this time I have an SDC that statistically closes higher, a Range bar target of 3411 (R27 points), and price action intra-day based on the R9 reversal bar. That afternoon from 2.50pm the market rallied into the close hitting the r27 high target that evening. Note: the Q set-up occurs at the bottom of double bar down r9, we use the first reversal bar as our entry into the completion of the R27 as shown in Figure 56.

I'm going to continue giving some examples of this so you can begin to see how the market can act in a very orderly fashion when you combine the three components of higher Timeframe dynamics and daily SDC cycles, and the Optimum Range bars using the first R9 reversal bar.

When trading any 2.50pm trend squeezes the initial move is normally a double R9 move into the close. The R27 completion bar might not occur until a gap open the next day or move and complete the move overnight on the 24-hour market. If you trade under strict timeframe guidelines and exit all positions at the end of the close, then always exit after the 2<sup>nd</sup> bar completion. If you wait to enter after the first bar reversal then the maximum return you can expect is 9 points. Note: the 2<sup>nd</sup> bar might dip slightly so the reward might not be 9 points and in fact might be shorter.

Figure 57 shows the breakout from the 3-month highs and trading above the weekly pivot high of 3438. If its trading above the weekly pivot high then we have an 'expectation' that price will remain above 3438 for the rest of the week. It's not a 100% forgone conclusion that it will; nevertheless the occurrence happens to often to dismiss our expectation.

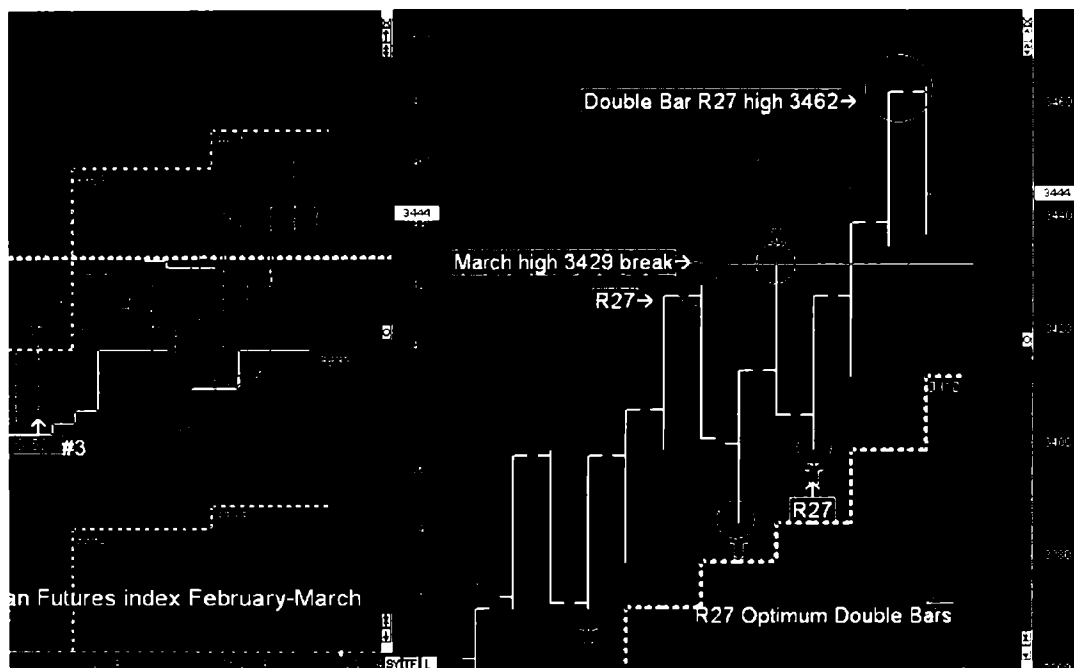


Figure 57.

When we have a close look at intra-day action and our SDC F set-up that day in Figure 58, (*F SDC, early price 'sell' action into trailing intra-day support zones*) we can make a model of expectation of what has occurred and more than likely what will statistically occur in the future. swinging the odds in our favour.

Figure 58 shows the following.

- Weekly pivot support 3438 (market overall bullish)
- 2.50pm lows in the market; statistically the market can reverse and squeeze the trend.
- We now have a double R9 reversal in the market for our target on a swing up using stops just below the weekly highs of 3438.

- Our profit objective is statistically reached at 3454, 17 point squeeze with a potential return 425\$ return per contract.

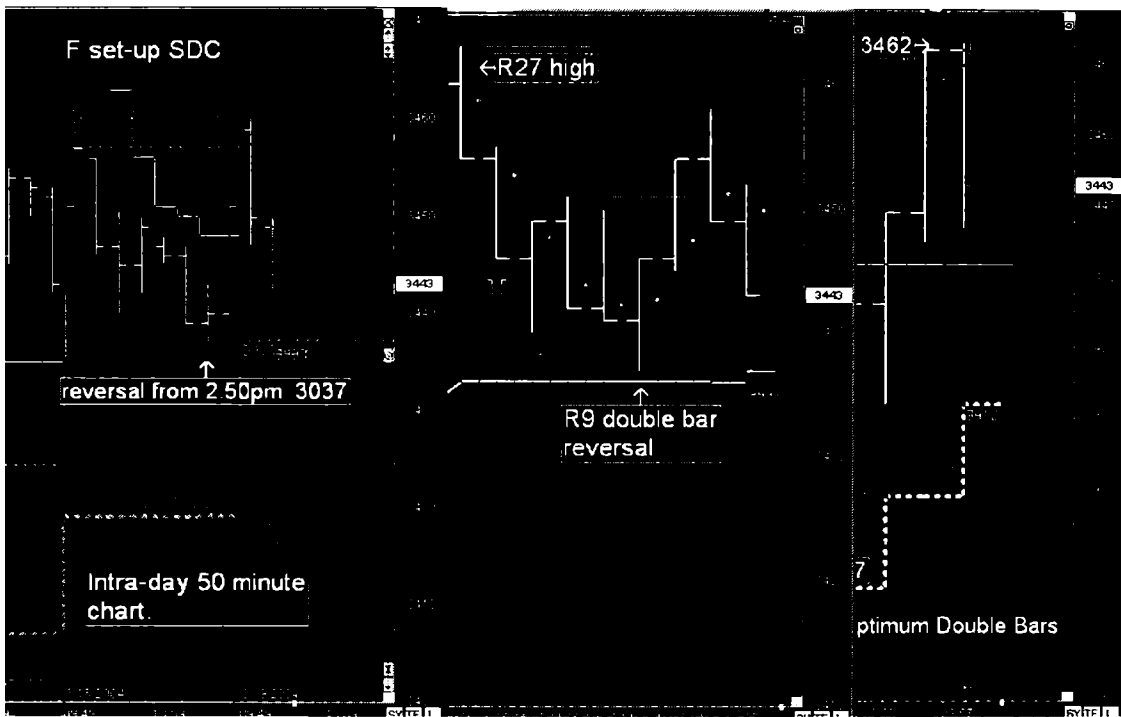


Figure 58.

I say potential return per contract because your entry and exit at 'price' will determine the return and profit. Keep in mind that 3454 wasn't reached in the say session today, it was reached in the 24-hour market. It is up to each individual trader to manage the trade. A day trader would exit on close and miss the probable move, another trader might wait and exit at the 2<sup>nd</sup> bar completion, and lastly, another trader might hold because of the expectation of price moving 27-points. But as we can see the 3<sup>rd</sup> bar reverses so a trader holding positions would immediately cover their 'open' positions.

There is no point shorting on the 3<sup>rd</sup> bar reversal because we are trading above higher timeframe ranges, so our focus is to trade on the Long side.

## Trader objectives.

Range Bars are a unique way of looking at the market and clarifying the market structure because it removes TIME and Price. We remove the notion of price because we are taking into account the gaps in the price structure, so we are incorporating levels in the market where no trades have actually occurred. This removes noise and gives a trader a view of the market being less random in nature and more statistically sound.

Statistically sound because each bar would need to complete in direction of the trend based on the 3-period cycle, so if we have defined an 'Optimum Range' a trader can develop systems based on the filter ranges with clear and precise profit objectives.

Range bars help define any double directional movement thus helping the odds swinging in favour of the trader each and every day. The movements have more clarity but traders need to be reminded, the movement of price will still be determined by TIME. TIME will still define the trends, TIME will still define resistance, and TIME will still define support. Range bars only help a trader define statistical profit objectives based on the Statistical movement of Price over TIME, thus completing the Optimum Range

Let's continue with the same sequence of events and look at the next days trading

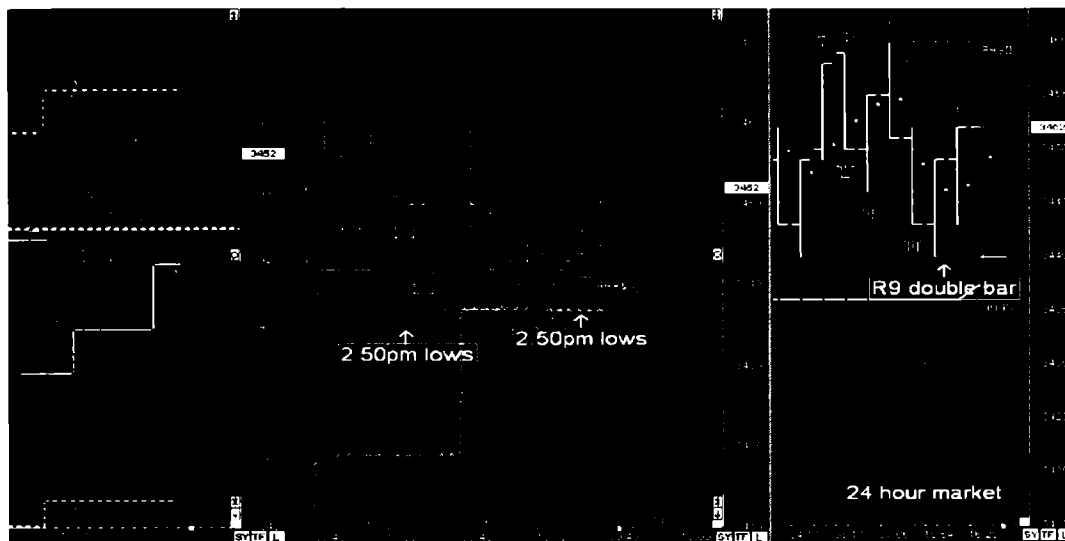


Figure 59.

The next day (figure 59) we have the exact same set-up, the same F SDC and the same 2.50pm reversal rally. But this time our double bar R9 is completed within the day session.

**Sequential trading is intuitive trading in a nutshell. Intuitive trading is pre-empting the market action, knowing before the outcome whether the odds of this trade will be profitable or not, whilst most price based systems that are systematic in approach are still trading without any probable outcome. A trader using sequential data must perceive the correct conclusion; each set-up works if and only if the trader trades the forecastability of that particular set-up.**

**Sequential trading is the route to successful trading, as it is part of the game plan and allows the trader to approach trading systematically and therefore a trading plan that they can stick to.** If one set-up has a high probable outcome then success can be ensured if the trader follows it, and along with the use of TIME, 3-day cycles and the Optimum Range, the Day-trader has turned a 50% probable outcome that many believe only exists in the marketplace to an edge with a tremendous advantage.

**Note:** For a detailed look at each SDC and price action please view the AMT CD and the 2<sup>nd</sup> file. This has a far more detailed look at all the variables and sequential set-ups. However I recommend you continue with the book.

## CHAPTER 6.

### Market Dynamics; Part 2.

The whole purpose of this book and the methodology of AMT is providing a 'window into the future' so we can statistically shift the odds in our favour. It is absolutely necessary to have an edge, without an edge you can't win! Trading stocks and trading derivatives are two totally different ball games but the same principles apply, Time, Math and Price govern the market dynamics.

As a trader we should be already trading with systems and in a systematic way as described in the 'numbers game', however using other methods that can enhance our edge can only be beneficial. AMT is a powerful and very robust methodology because it statistically gives an increased edge; defining risk-reward!

One of my favourite external indicators is using the McClellan timing tools. When combining the McClellan timing tools along with what AMT provides the actual timing of the trade and probability is increased profoundly. These timing tools are known weeks in advanced and highly accurate, however using these timing tools alone are not recommended unless combined with something that confirms the market structure, hence using the 3-day cycle or each traders own mechanical system and rules that they are using.

These are examples of the McClellan timing tool and posts in forums and the event that's followed.

Let's first start with Figure 60 and the price action of the market. We can visually see the market hitting the January highs and selling off and breaking the 3-week dynamic trio. This is the first time this has happened in over 10 months and price action is very bearish just after the start of the new Primary cycle of 2004. The highs were on the 27<sup>th</sup> of January and the break followed through on the 29<sup>th</sup> of January. Following is a post highlighting the McClellan tool

Subject	SPI 2004.
Posted	31/01/04 08:31 - 308 reads
Posted by	Frank Dilemia

McClellan Timing bottom pointing to a major bottom reversal around the 9th February.

+++++

The interesting part of Fridays close was, its the **first time that our market has had a weekly close below the past 3 week lows since those 3 week highs broke in March 2003.**

What conclusion can I make of this, well I can take a statistical probability that the highs for 2004 could be set in place and until we get the reverse occurring of a weekly close above 3346

**Using the McClellan timing tool, look for longs back into those highs from the 9<sup>th</sup> February, but those Jan highs will be a brick wall.**

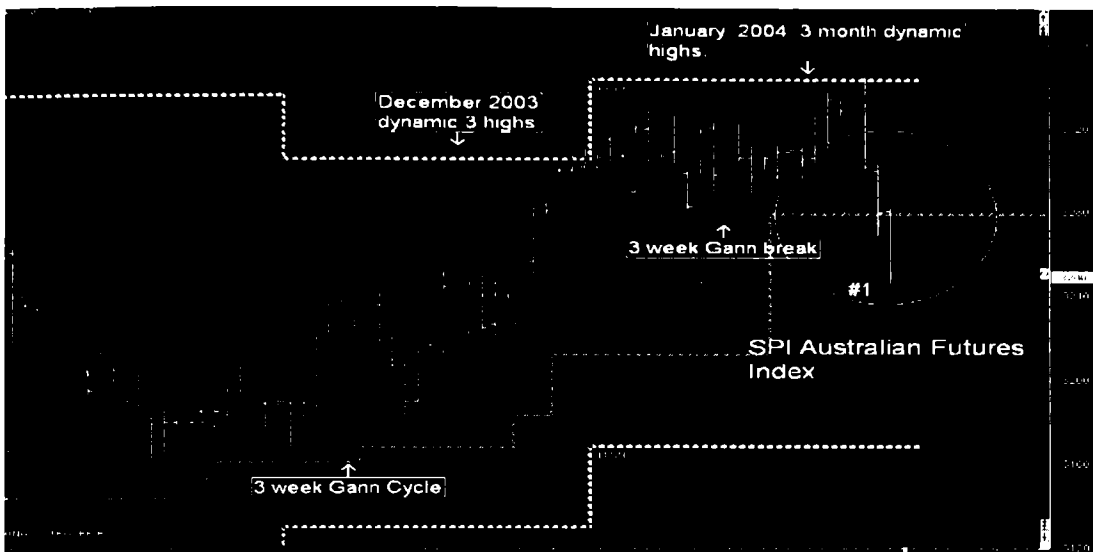


Figure 60.

The important part of the market structure in Figure 60 is the price action failing once again at the dynamic highs using the monthly timeframe in January and then breaking the 3-week cycle. This scenario is very bearish; however on this day I made a call that on the 9<sup>th</sup> of February, 10 days from now the Market will swing back towards the highs once again, because of the McClellan timing tool.

Figure 61 shows what has occurred. Price remained below the 3-week break and was supported off the 3-month balance point of 3257. On the 9<sup>th</sup> of February the market broke the 3-day highs and rallied back towards the 'new' February highs and then once again failed moving back to the 3 day cycles low and then onto the new dynamic highs in March 2004. The 3-day cycle keeps the trend intact.

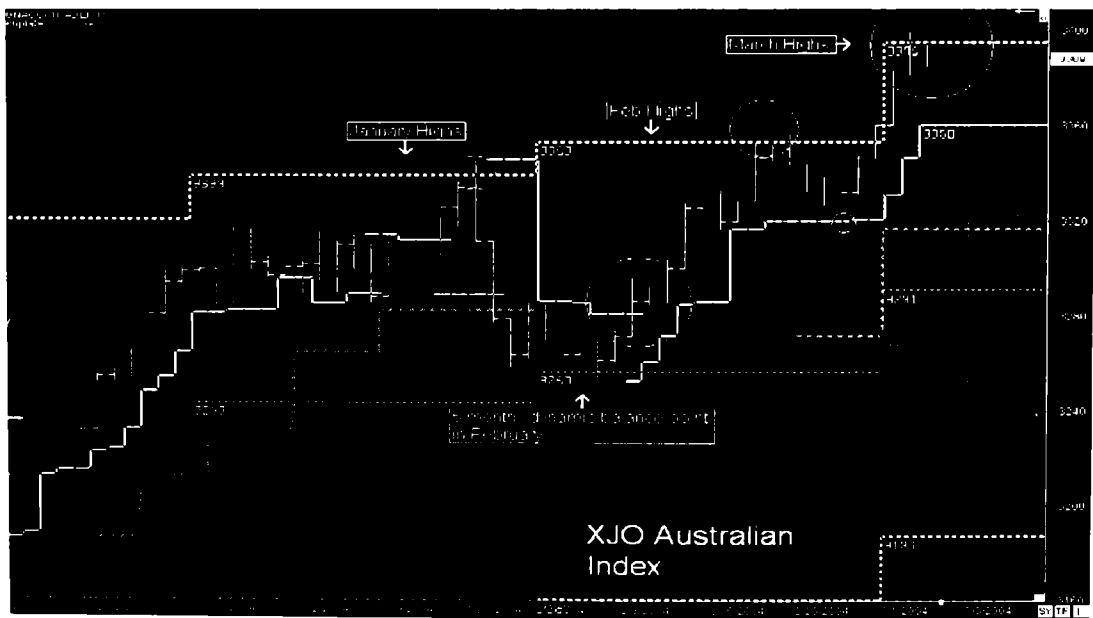


Figure 61

Does History repeat itself in the markets? Is price action random and a product of human sentiment? Is very moment in the market unique?

My answer to those questions is Yes, No, and Maybe.

Lets move forward 3 months from now and look at price action in April 2004.

Figure 62 shows the market structure and the cycles. We can see the market hitting once again the April highs and stalling. In March we have a breakout of the 3-month extremes but this also coincides with the contract expiry, and then moves higher once again in the new month of April 2004. We can see price failing at 3485 and the exact highs and now today is the 28<sup>th</sup> of April, 3 months from the previous sell-off in January.

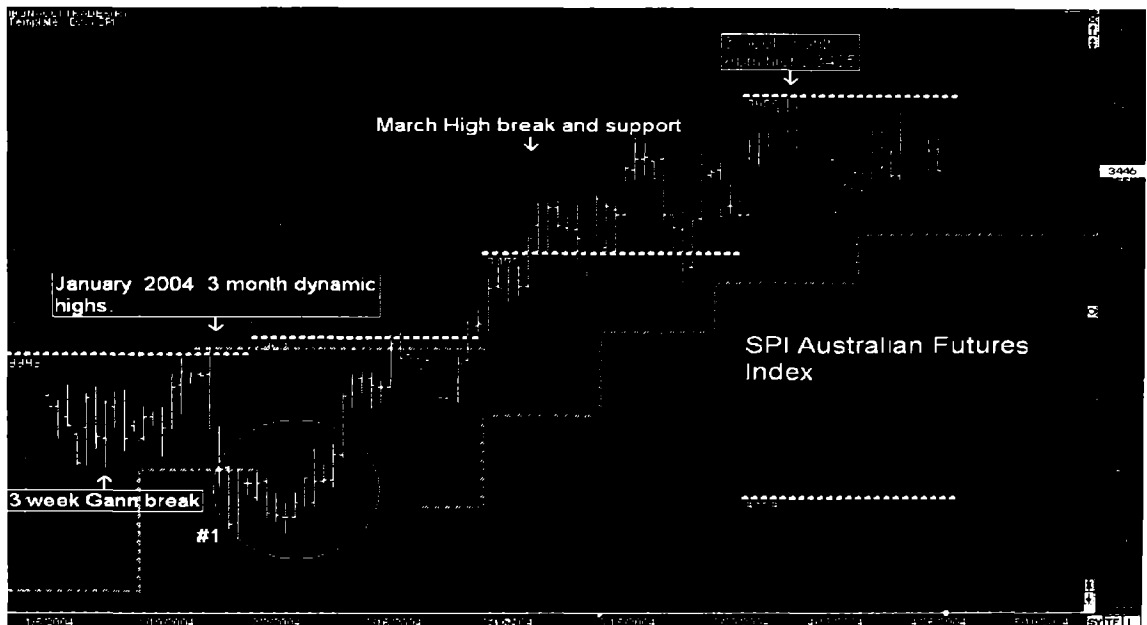


Figure 62.

Subject re: timeframe levels.  
Posted 28/04/04 17:11 - 160 reads  
Posted by Frank Dileria  
Post #1821 - in reply to msg. [#1820](#) -

It will be interesting now because the 3-day lows have now moved into 3444 and support.

However, Mr McClellan is looking for a top on US markets on the 28th, tonight....

If that were the case I'd watch those 3-day lows tomorrow.

Hotcopper post.

Figure 63 shows the outcome of what occurs. We can see the failure of the April highs and the break of the 3-period cycles to the precise day. So what can conclusion can we make of this, well if history repeats, then the same sequence of events should follow, a move down to the same level and the 3-week lows 3409 as the first reference.



Once again we can see these 3-week cycle lows forming resistance as in January 2004 and then in the new month of May the Market structure moves down towards the new dynamic 3-month 50% level of 3344, the exact same price action as in January 2004.

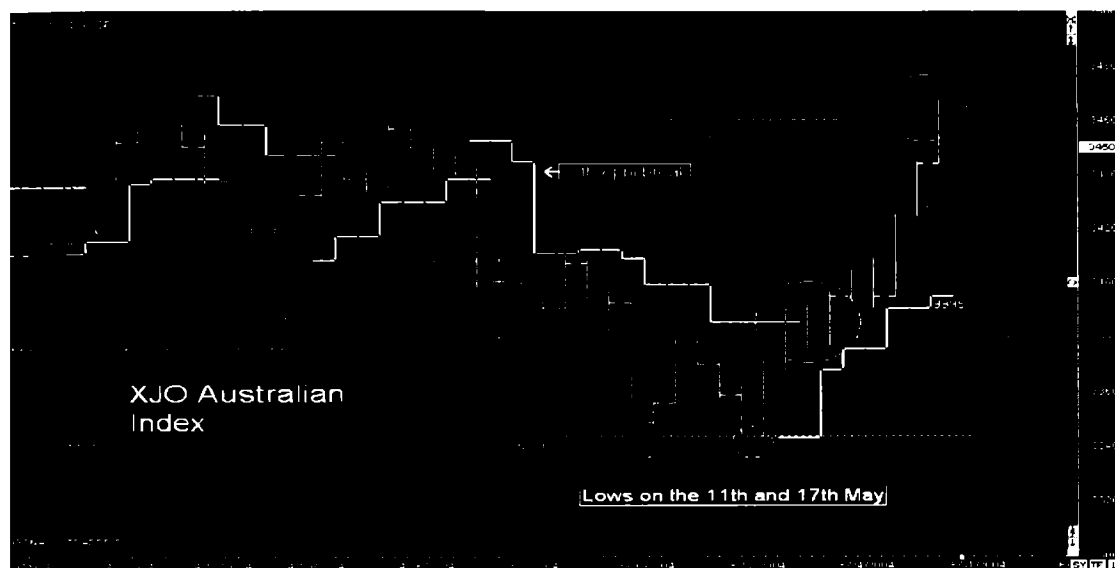


Figure 63.

Subject               SPI  
 Posted               30/04/04 06:59 - 126 reads  
 Posted by           Frank Dileria  
 Post #1827 - start of thread

This price selling action mirrors the same price action back on the 28/1/2004 when prices broke the 3-day lows and went straight through the 3-week dynamic lows.

On that occasion the trailing 3- WEEK lows (3280) provided the resistance, so we need to keep in mind that the same 3-week lows of 3409 can provide resistance.

The re-occurring dates, patterns and price action are mirroring each other now as it was then, and **McClellan has his next timing date on the 10th of May**, last time he had his timing date on the 9th of Feb, so we need to keep our eye on this date and the 3-day highs on a confirmed break for a reversal.

**If the price action and drop mirrors the same drop back then we should be heading towards 3344** however that will be confirmed on the monthly close of April.

Again, I have made the same 'model of expectation' now based on history repeating itself. Sure there is no 'positive-expectancy' that this will occur now as it did then, but I'm not going to dismiss it either and trade the price action when it conforms to my variables. And as traders we still need to wait until the 3-day cycle changes to confirm the cycle change because our ultimate target would be the new highs in May.

Couple important scenarios here, **you now are becoming a ‘two type’ trader**, that is a day-trader in derivatives using leverage, and on the confirming break of the 3-day cycles you can move into leverage positions on stocks. If the market has a probable move of over 150 points into the new monthly dynamic highs then it will drag stocks along with it. We buy and hold for the medium term whilst we are ‘day trading’ the SPI using the sequential SDC cycles each and every day. Until the market reaches the extreme in May (not always a forgone conclusion) and then breaks the 3-day cycle lows and reverse the trend, traders should hold positions with strict monetary trading rules.

**As long as price is above the 50% of monthly, quarterly, and yearly dynamic 50% levels then the trend is UP, and traders should use this information to trade the higher timeframe cycles.**

As you can see, once the variables line up using both forms of discretionary methods we can trade with confidence of trading the larger trends and knowing statistically where the market is travelling and statistically where the market might likely stall.

You will realise that even though the market is described using the 3-period dynamic ranges of the medium and longer market structures (weekly & monthly timeframes) traders who prefer to trade over a longer-term can use each 3-period cycle to define the trend towards those extremes. However, day-traders need to understand the market structure whilst trading each individual daily cycle. With the use of the ‘Optimum Bar Range’ and the ‘Single Day Cycle’ using sequential data of directional price movement this can only enhance your profitable system that you are already operating under (numbers-game) and can be most advantageous for any experience trader, or help any aspiring trading taking the first step towards trading intra-day in any non-linear derivative market.

## **Trading...**

The total concept of AMT is trade the markets as they evolve, discretionarily placing trades in the marketplace where the reward outweighs the risk. AMT provides the statistical and probable theory of the markets based on TIME instead of Price, knowing statistically the odds of our trading day behaving in a repeatable manner whilst trading the probability scenarios of the 3-day cycle. Statistically we use past data to view the trading day in advance and the probable action of the market rotating and extending as TIME moves forward using all higher timeframes and 3-period cycles.

Trading is a pattern recognition numbers game determined by TIME, we analyse and identify the patterns, define the risk and determine our reward. Whether the trade works or not, we simply move onto the next. Understanding that the market moves in waves of TIME instead of waves of Price will determine all our Risk to Reward probabilities.

Technical analysis has evolved because traders want to be able to define the price structure of the market and then make a 'model of expectation' about any future price move. Methodologies have evolved so that a 'model of expectation' about any future price move could be pre-determined with high accuracy. The methodologies that exist in the market have the same characteristics; cycles, waves and extended movements of past data to provide the necessary framework to profit in the market place. Elliot looked at the market structure and developed an understanding that the price action moved in an action-reaction framework, all up moves are followed by corrective moves and all corrective moves are followed by up moves. Within this continued ebb and flow certain patterns could be found that repeated itself and Elliot developed the wave theory consisting of five waves; three impulse waves followed by two corrective waves.

The Elliot-wave framework has been used by many traders to define the market structure and is probably only one of a few that has been universally accepted in the market and technical analysis fraternity.

Cycles in the market have been defined by seasonal patterns or unique rhythms of each stock or derivative, these cycles exist in all timeframes and are built on the 'observed phenomenon' that events have a tendency to repeat themselves at more or less at regular intervals. Traders who use any cycle theory will normally look at the distance between the highs and lows and the span between the two and then make a calculated judgment that they will be in a better position to anticipate the next high or low. The best-known structural analyst and cycle trader is probably Gann and his belief that mathematical patterns of precise movements governed the markets. The integral part of his system are the Fibonacci numbers and angles of price-trend that provide a 'model of expectation' for the next top or bottom in the market.

Peter Steidlmayer developed a methodology that offered a logical and organized set of rules that defined Value. Traders now had a visual on price and time so they could arrive at an assessment of where price is at any time relative to value. The key to successful trading lies in being able to determine in which direction the market is headed and with the use of Market profile traders now could develop an assessment of when price is above, below or at Value.

These three methodologies are the backbone of most systems that exist in the market place today, as most systems try and define the trend, try and define the Value and try and define where price is headed using mathematical equations of past data. Whether it is Gann, Elliot or Steidlmayer their methodologies provided a discretionary definition of past price action so traders could develop a 'model of expectation for the future. The universal component to all three was TIME. Time of length defined the trend, Time of distance defined the cycle, and lastly, Time of price defined the Value.

This book so far has evolved all three methodologies and provided a working model of how price will trend within the market structure defined by TIME, how price will cycle with the use of 3-periods of Time, and how Value is defined by the of the central points of TIME. More importantly, this book has provided a 'window into the future' using Time and math.

And importantly comprehending that the only success that can be guaranteed is that we understand the 'game of numbers' and 'understand the monetary value' of why we trade.

### **Let's Continue...**

I posed the question in this chapter; is every moment in the market unique? And my answer was, 'maybe'.

Of course we know the market is unique; different sets of buyers and sellers, different volumes, different prices and of course a different time. However, when begin to understand the dynamics of the market we begin to observe the phenomena that the market is actually repeating itself. The past can provide oneself with making highly accurate models of expectations for the future as long as we understand the relationship of Time and Price and how it can govern any future move. By observing how the market has acted in the past, traders should be able to swing the odds in their favour and develop an understanding of what can occur in the future by simply looking at what is in front of them. This might sound simplistic and it is! However, many often distort simple things and dismiss any form of 'prediction' as a path towards failure.

One of the most famous exponents of Time forecasting is Gann and his methodology. He based his assumption that any one point in Price or Time is a reflection of some important event that had occurred in the past, and correspondingly, any action occurring in the Present will forecast future actions. The biggest problem with Gann is; his methodology is extremely difficult to automate. A mechanical system that will provide the 'numbers' that give trader's the positive expectancy is what most are seeking. Sadly most discretionary methodologies fall in the same bucket, as do Elliot wave, Market Profile and Fibonacci.

However these methodologies still become part of many a trader's arsenal because they help guide or provide an illustration of price action even though they know that each methodology cannot be fully back-tested and provide a 'positive-expectancy'. If we focus on this then there could be an argument that every one of them fail as 'stand-alone' methodologies. They are only guides and traders should be reminded of this, as with most other trading techniques that are marketed and sold to the public.

Analytical Market Trading can be placed in the same bucket if it's not possible to automate the methodology and should be only used as a guide or an enhancement. In the chapter (Market Dynamics and Systems Development) I'll describe in detail the workings of AMT theory and how it has been automated, and briefly outline why so many traders fail when trading short-term derivative markets.

## Analytical-Market-Trading.

AMT is a methodology that is based on TIME and the statistical nature of market dynamics, and I'm a firm believer that the market often repeats itself and provides many opportunities to profit by. AMT also clearly maps the market structure that helps identify Risk-Reward probabilities using 3-period cycles and 3-period dynamics over numerous timeframes as described in the earlier thread 'Market Dynamics'.

Lets revisit the previous article and the model of expectation I made of Price moving higher in May-June 2004 based on the same occurrence back in February-March 2004 (3 months apart).

Figure 64 is re-showing the price action of the XJO back in February 2004 and the rally into the new 3-monthly dynamic highs 3353, failing and dipping back into the 3-day lows of 3320 before heading higher once again and into the March contract expiry.

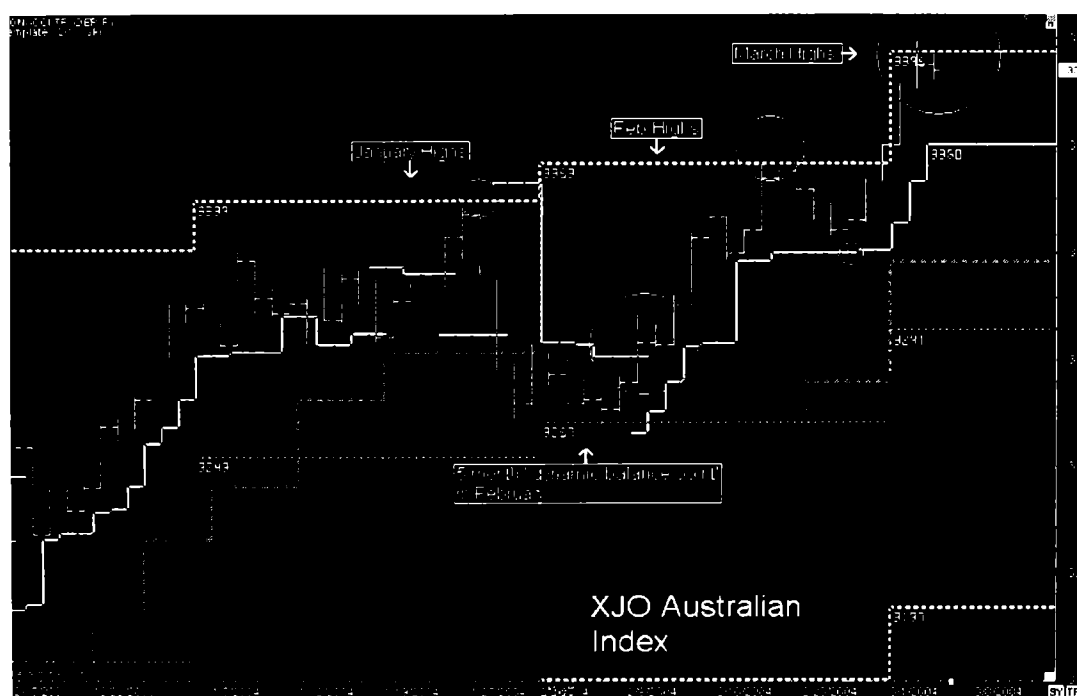


Figure 64.

Figure 65 is re-showing the same sequence of events in May 2004 based on the fall, then the break of the 3-day highs and rally. If the same sequence of events is to unfold, then the same sequence of events should take place, a rally into the new 3-month highs (June 3504) failure and move back towards the 3-day lows before rallying to new highs in June 2004.



I posted this on the close of the trading day of 7th June 2004 when price closed at 3500. The 'models of expectations' I have provided are that 3504 is resistance and if we follow the same sequence of events now as then, the market should move back towards the 3-day lows of the XJO 3460, before heading higher into a new high of 3544 because of the Spot contract will move towards the Future contract price high on expiry.

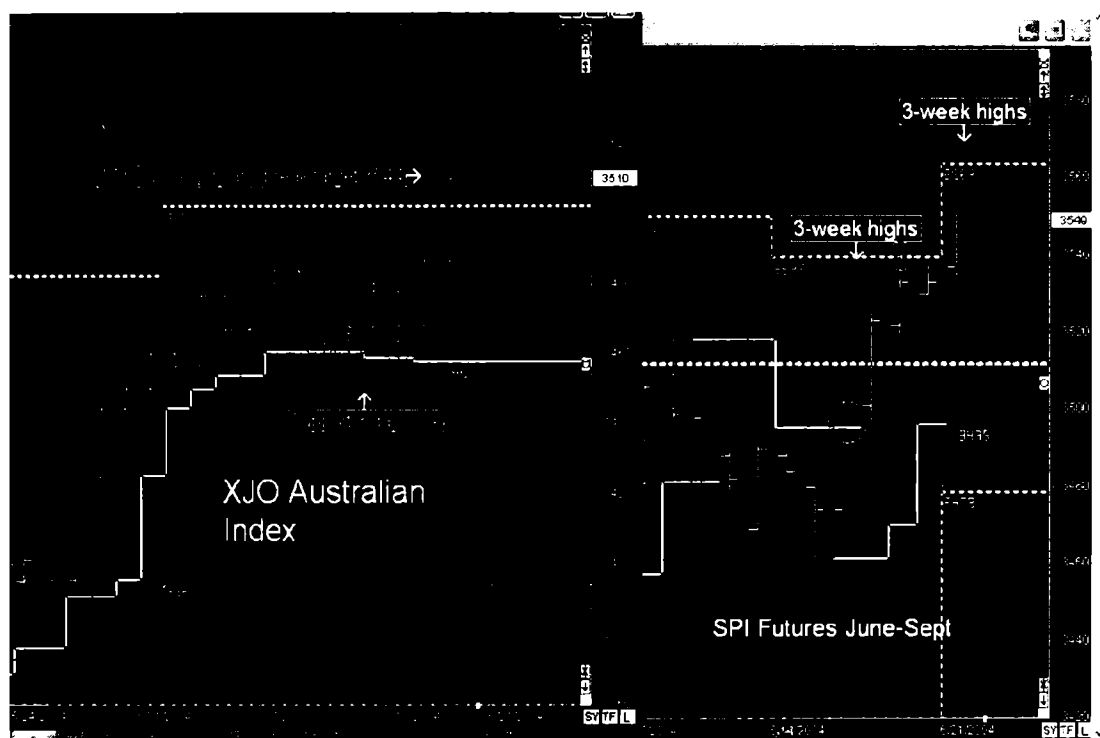


Figure 66.

Figure 66 illustrates what occurred, we can see the same events taking place, the 3-day lows on the XJO supporting price before rallying into the 17<sup>th</sup> of June and the close on this trading day confirms the break of the market for this timeframe, or the model of expectation that price can remain outside this zone until the end of the month.

When we look at the SPI in the chart on the right, the dynamics are similar except the cycles are different, the XJO cycle remains a BUY, whilst the SPI is a Sell until it breaks 3494 (3-day high) and once it does that it moves directly towards the 3-week highs of 3539 before stalling and then moving higher as the new week projects a higher weekly market structure 3463. This 3-day break and move into the 3-week highs is a re-occurring phenomenon and provides traders with clear and precise targets as I have repeatedly mentioned.

In my opinion traders should keep an eye on both, the SPI future contract and the XJO using the same AMT model.

We now have the market breaking the 3-monthly cycles, can we look at the next higher timeframe (Quarterly) for a model of expectation that these higher levels can act as a magnet/target and also provide a resistance zone?

Figure 67 is the 3-quarterly dynamic levels of the market. We can see in the left chart the market breaking the 3-month highs and moving to the 3-Quarter highs of 3456; if the same sequences of events follow then our new model of expectation is that Price is likely to head towards 3588.

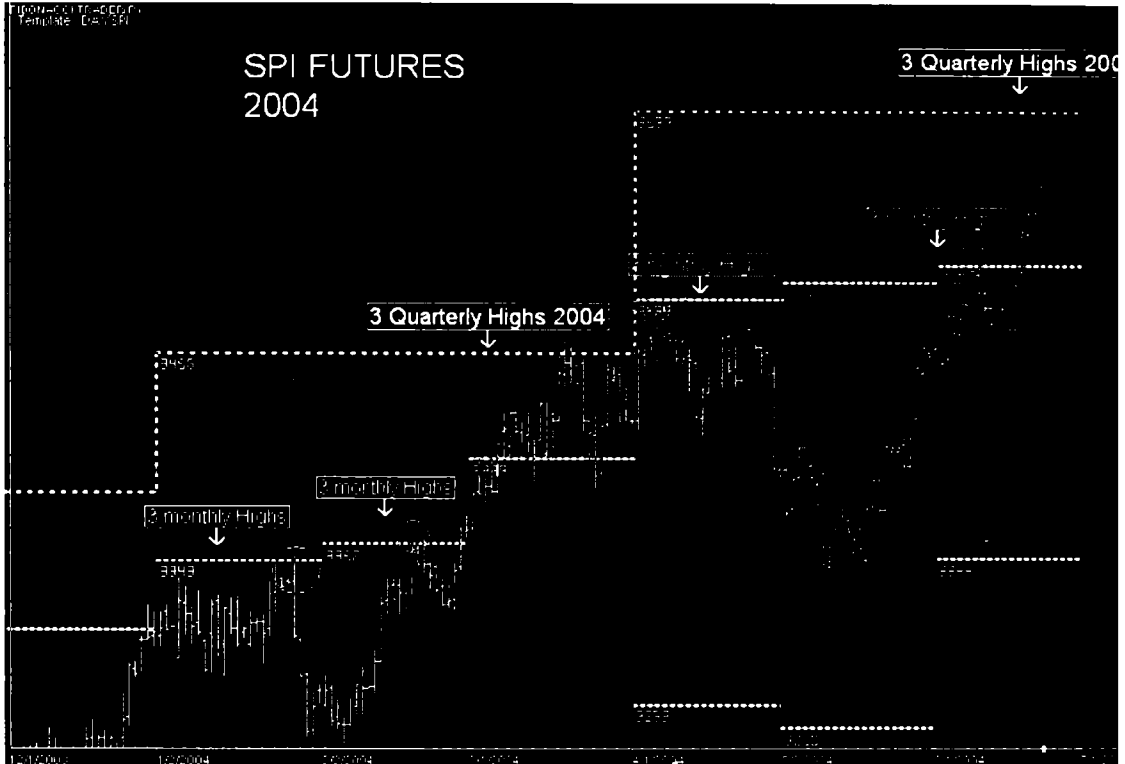


Figure 67.

As we can see the same events are taking place but in the higher timeframe and secondary trend. What might look like tops in the monthly cycle might only be steps towards the greater cycle as we can see above. Looking at the higher timeframe allows us a longer-term target and there is no reason to short the market if you are a 'position-trader' or to exit any leverage positions on stocks because of the major breakouts on the higher timeframes.

When we have a close look at both the R27 and R9 bars as shown in Figure 68 we can see some potential daily targets based on the statistical price movements that often occur and reoccur each day. This is a must for any day-trader because this defines the Risk-Reward of any short-term intra-day trade. Basically we have a model of expectation or '**window into the future**' where statistically price is heading, what the statistical movement of price is, and where price is likely to move towards in the higher timeframes, and even stall and reverse back into the 3-day cycles. The Market Risk all on these parameters defines our Market Risk.



However even in a trending market using all those parameters we can still trade against the Trend, which is a serious trading tool once we define the market structure based on statistics and use the optimum reversal bar and Range of Price target.

Don't get tied down by the dogma and rhetoric of trading with the trend, because doing the opposite can provide a day-trader or a swing trader with the potential of making serious money.

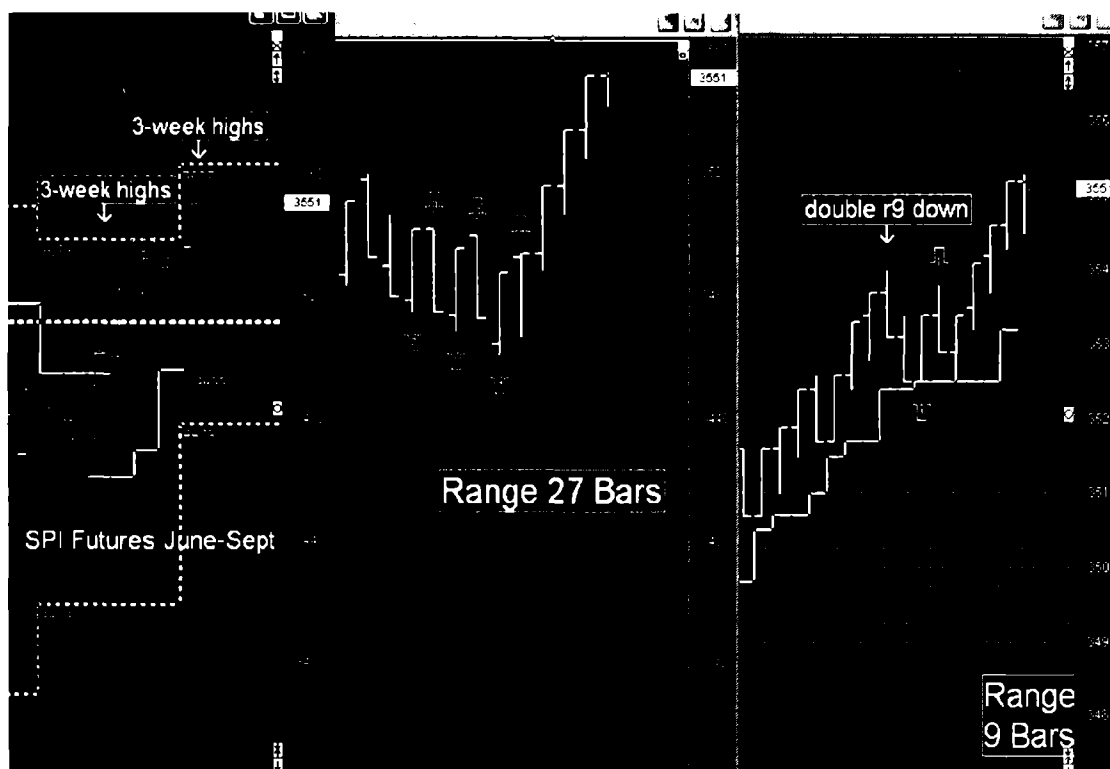


Figure 68.

Figure 68 shows three charts; the daily on the left, the R27 in the middle and the R9 on the right, we can see the price action and rotation of price based on the r27 and once the 3-day highs break of 3494, each up move follows a statistical move of 27 points, we simply use the R9 to enter, exit and filter all our trades. And it's not until price reaches 3539 and the 3-week highs that price has its first double r9 down to 3425, once this occurs it forms support and confirms its next wave up to 3552 based on the next r27 in the new week that has a new dynamic level of 3563.

### Trader's Objectives:

Understanding the dynamics of the market structure is a must for any serious trader. Even though many will find it hard to automate any trading system based on this methodology it should be used by all as a guide and help illustrate clearly what the market is doing and where price is heading towards with high probability and accuracy.

If price breaks one level then it is more than likely move towards the next dynamic level, if any level does break then each movement in price will have a statistical tendency to move in an optimum wave or in this market 27 points. These 27-point moves can be the entire range for the trading day and the next R27 might not happen until the following day.

Trading is a pattern recognition numbers game determined by TIME, we analyse and identify the patterns, define the risk and determine our reward. Whether the trade works or not, we simply move onto the next. Understanding that the market moves in waves of TIME instead of waves of Price will determine all our Risk to Reward probabilities.

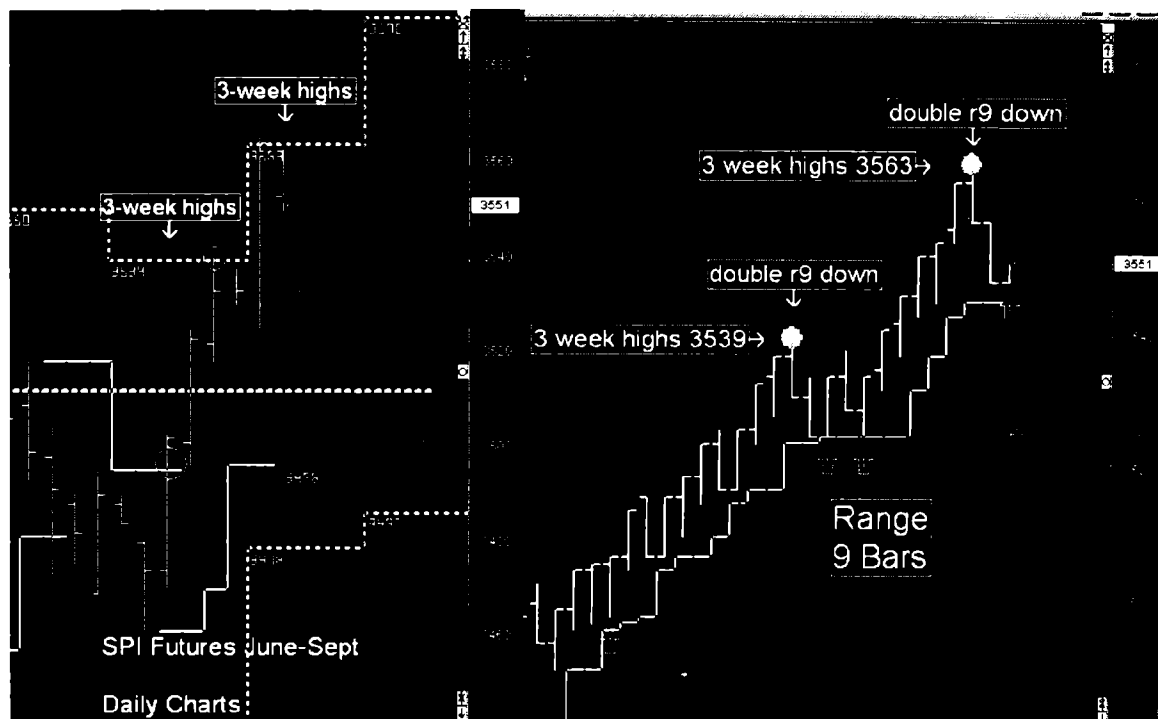


Figure 69.

We again can see the same re-occurring pattern of price hitting the 3-week highs of 3563 and reversing a double r9 down. These patterns again continually occur over and over again.

I also recommend any trader find some publication or service that provides 'timing dates' in advance. Many traders dismiss these types of services because they believe trading using dates or astrology is a fool's paradise. Keep in mind most dates are based on numbers and most timing services are based on historical events that are smoothed out using oscillators. These services provide 'dates' in advance that can help any trader increase the edge they operate under when it conforms to their own methodology or system. You will begin to see in the future that these services will begin to attract a lot of attention and will become an important discretionary tool because they can provide major turns in the market. Sadly price indicators don't provide this information because in theory they are based on Price and that is something that has already occurred and is therefore inherently late.

Traders deep down want more, they want to be able to pre-empt market turns or statistically pre-empt market turns with high accuracy, but sadly many traders can't fathom how to do this or have failed miserably trying to do this. If you have failed to do this then why not subscribed to someone that has already done all the hard work. If they have developed propriety indicators and begin to have a following amongst experience traders then there has to be something there for everyone. Do not dismiss these services because of your own core beliefs; each person's belief can be as much of a hindrance as it can assist. In my experience they have helped myself greatly.

## **Timing Indicators and Services.**

AMT doesn't have any relationship with any of these indicators or services. I prefer that traders begin to take notice of some of these indicators and services and how accurate they are and how they fit in with their own trading style. This will of course take time because they can't be back-tested easily, however I'll briefly describe some of them.

AMT is heavily influenced by TIME because I believe Time is the only thing that is forecastable as I have mentioned many times before and this is clearly evident when we look at the market dynamics. Most timing services or indicators are based on the same theory, TIME/DATES, where historical events will have an influence on future events. Most of these timing services are proprietary based and are mainly illustrated using oscillator type indicators that will provide dates in the future that provide the potential of a market turn, however these markets turns are random, meaning that, the turn of the market moving higher based on the date doesn't have to be a 'low' in the market, in fact, the service or indicator might forecast a turn for the market to rise and the market could already be near its highs, this is why traders need to be careful if flippantly using these services and dates. I highly recommend using these services as a confirming tool that can operate in tandem with your own profitable trading system.

## **Bradley Indicator.**

This indicator is getting a lot of notice lately. This stock index forecasting tool was designed by astrologer Donald Bradley and published in 1947 in a booklet titled "Stock Market Prediction". On the cover this tool is called the Planetary Barometer and inside the booklet it is called a Siderograph. It's simply called "the Bradley" these days. The Bradley is meant to forecast major and minor turning points (where a trend will reverse) in either the Dow Jones Industrial Average or SP500 indexes. It does not forecast or anticipate whether that turning point will be a high or a low, so we say it forecasts "non-directional turning-points". In Bradley's own words:

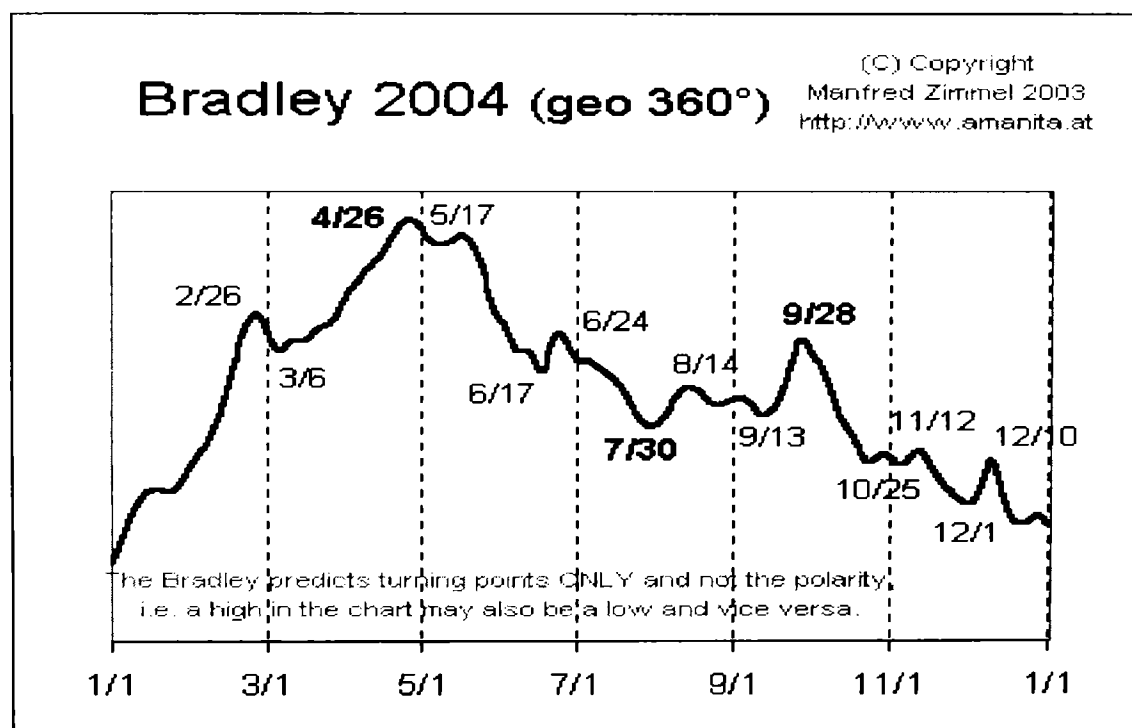
*"At no time must the reader gain the impression that a siderograph, as such, is a prediction of what the stock market will actually do. Nevertheless, observation proves that basic reversals in collective attitudes, clearly predicted by the line, are inevitably mirrored in stock averages"*

Now what does the Bradley actually measure? In fact The Bradley is a geocentric transit-transit model evaluating planetary aspects. Now, if I hadn't any experience with this indicator and I had read what it actually measures then I would probably dismiss it as it falls into the weird and wonderful world of Astro-trading. When I first released my book before having any experience with this indicator I had thrown this type of methodology with many others into the dustbin.

*"Fibonacci, Gann, Murray Math, Elliot wave, Astro-cycles, Market Profile and most other obscure methods have a tendency of leaving the analysis open to interpretation. They fall into the category of 'trade and hope.'"*

Now time and experience is changing my view on these obscure methods.

Figure 69 is a Chart of the Bradley indicator and timing dates for 2004. These are defined at the beginning of the year and will provide 'timing-dates' for the rest of the year.



**Figure 69.**

Don't actually concern yourself with the trend of the graph, it doesn't mean the market is going to fall from the MAY highs; these days are to forewarn of a possible turn in the market. When we combine the dates and AMT when can forecast many days in advance and then trade when the variables are aligned with the AMT model.

Figure 70 is the chart of the SPI and I've highlighted the dates in Red and where they had occurred within the market structure. The confirming move is backed by the 3-day cycle break.

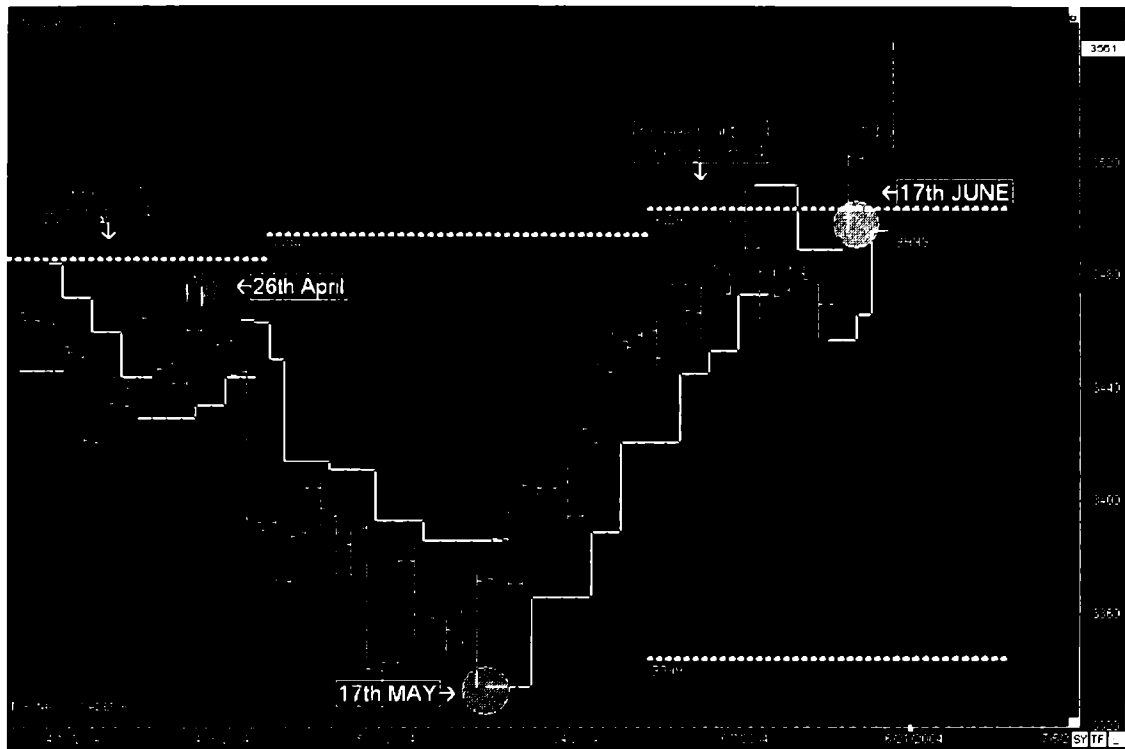


Figure 70.

A word of warning:

Before I continue I just want to poke some fun at the expense of the person who actually provides a service using this indicator to subscribers (name is withheld). This is his post to subscribers in May 2004.

*"Now to the future outlook: **May 9-17, June 17-24, and July 30-August 2** are the next full ( triple) Bradley signals and thus candidates for intermediate-term trend reversals in the stock markets. The May cluster has the smallest amplitude in the chart so it certainly is the weakest signal. A final comment apart from the Bradley: I am pretty sure we are heading into a major global crisis in June, which should cause major disruptions in the financial markets (more in the subscriber area)."*

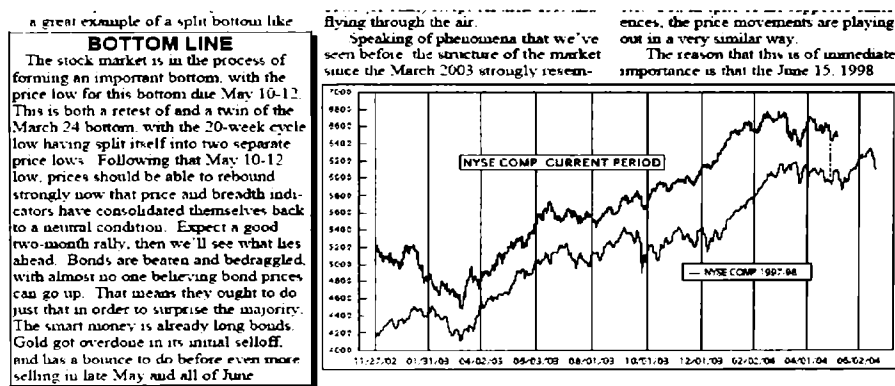
How wrong was this person's own 'model of expectation' to his many subscribers. His timing dates were pretty much spot on, however he completely called it wrong, and that is why these services are useful for providing information in advance but they are completely discretionary in nature and must only be used when they conform to each trader's own systems.

In his defence, the Bradley provides turning dates in advance but don't necessary provide which way it will go. However, once you understand the market dynamics, the cycles and higher timeframes you then can use the information that meets your own model of expectation as I had used it to great effect on this rising 'bull' market.

## The McClellan Oscillator:

The McClellan Oscillator and service is my favourite. It is a subscription-based report that is delivered bi-monthly and focuses heavily on the US markets, Bonds, and Gold. Again caution needs to be used because the same applies as the Bradley, however my experience is that the 'timing-dates' delivered weeks in advance can be highly accurate and is a major part of my trading when it conforms to my own variables and mechanical systems that I use that will described in the next article.

These are McClellan words when the report was delivered on May 7<sup>th</sup> 2004 and following are his timing dates for the US markets, Bonds, and Gold.



The McClellan Market Report

p. 6

Report #218, May 7, 2004

## TIMING MODELS

Stock Indices (DJIA, SPX, Nasdaq, NYSE Comp., etc.)			
SIGNAL	SOURCE	PREDICTED	ACTUAL
Bottom	NYSE A-D Osc	Apr 22-23	Apr 21
Bottom	SP500 Price Osc	Apr 23	Apr 21
D Top	Nasdaq ST Price Osc	Apr 28	Apr 27
D Top	DJIA ST Price Osc	Apr 28	Apr 27
D Top	Nasdaq ST Price Osc	Apr 28	Apr 27
D Top	SP500 ST Price Osc	Apr 29	Apr 27
Bottom	A-D Summ Index	May 4	Apr 30
Bottom	Nasdaq Price Osc	May 6	
E Bottom	Nasdaq A-D Osc	May 7	
E Bottom	DJIA Close-Sum	May 7	
E Bottom	SP500 Price Osc	May 7-10	
E Bottom	A-D Summ Index	May 10	
E Bottom	SP500 Up-Down Osc	May 11-12	
E Bottom	SP500 Close-Sum	May 12	
E Bottom	Volume Summ Index	May 12	
Bottom	Nasdaq Close-Sum	May 17	
Top	SP500 Up-Down Osc	May 18	
Top	Nasdaq A-D Osc	May 19	
Top	Nasdaq ST Price Osc	May 25	
Bottom	SP500 Price Osc	May 27	

Bond Market (Corporate & Treasuries)			
SIGNAL	SOURCE	PREDICTED	ACTUAL
Top	T-Bond Stochastic	Apr 21	Apr 22
Bottom	T-Bond Price Osc	Apr 23	Apr 23
Bottom	T-Bond Stochastic	Apr 23	Apr 23
Bottom	Bond A-D Osc	May 24	
Bottom	T-Bond Up-Down Osc	June 7-8	

XAU Gold and Silver Index			
SIGNAL	SOURCE	PREDICTED	ACTUAL
D Bottom	Gold Close/Sum	Apr 26	Apr 28
D Bottom	XAU Price Osc	Apr 28	Apr 28
E Top	Gold Price Osc	May 10	
Bottom	XAU Price Osc	May 14	
Top	[Dollar Index Bottom]	May 18-20	
Bottom	XAU Close-Sum	May 21	
Top	Gold ST Price Osc	May 24	
Bottom	XAU Price Osc	June 2	
Bottom	XAU Up-Down Osc	June 14	
Bottom	XAU Close-Sum	July 6	

subjectively only presents us with a limited picture

Figure 71 is the same as figure 70 except I have added the McClellan timing tools as Blue dots and keep in mind that McClellan is calling for a 2-month rally from the lows in MAY of around 10-12 May

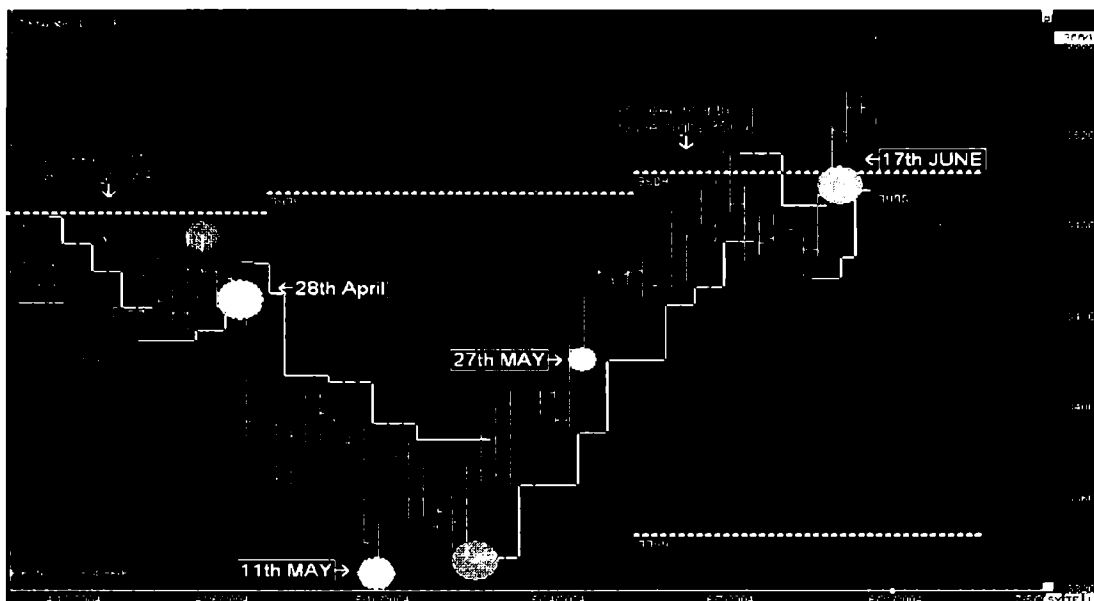


Figure 71.

In figure 67 we have moved from the 3-month dynamic ranges and look at the higher timeframe of the secondary trend (quarterly) using the same model and have a probably target in this quarter that price could move as high as 3588. **If that were the case then it would be only right to look at the highest timeframe and the Primary trend and see where the 'possibility' of the market moving towards in 2004.** Using the exact same calculation we would have a 'model of expectation' that the market has a probability of moving towards the extreme based on the Primary Trend at 3645.

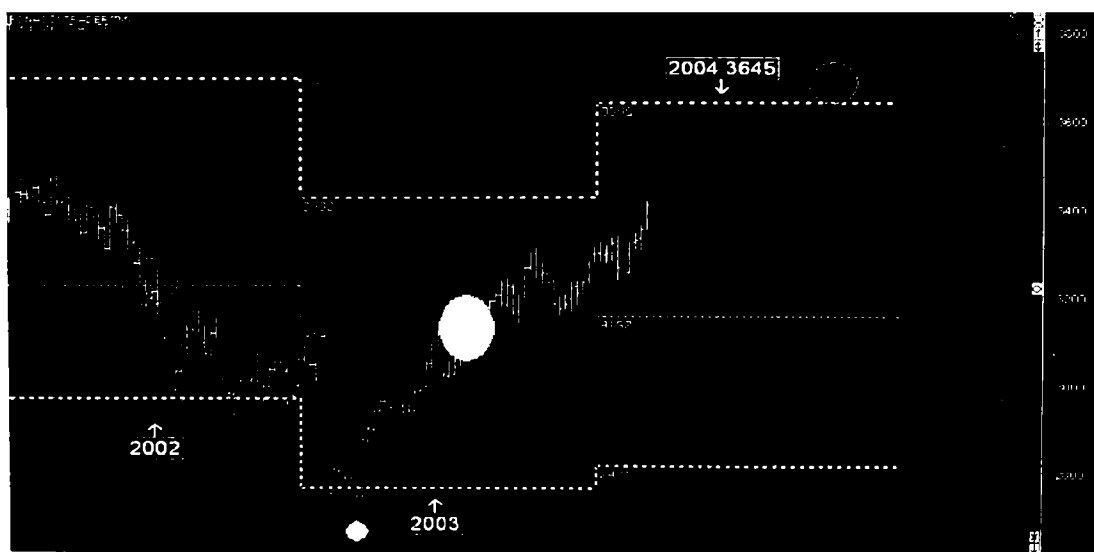


Figure 72.

Figure 72 actually shows that our target for 2004 is 3645 based on the same model. We have a clear and defined target for 2004 and should trade it as we see it. As long as price remains above the higher timeframe 50% levels then the Target is the extreme of the range. In this case it's 3654.

Even as short-term derivative traders we should all know what is occurring in the higher timeframes because it now allows us to be a two-way trader. The two-way trader is now trading same market however using different strategies to maximise the potential of the market. Firstly as a short-term trader using non-linear strategies on futures, and secondly, a medium term holder of stocks using leverage all incorporating the same generic AMT model. What is most important of the AMT model is its generic for all that use it and not curved fitted like the many other methodologies that are sold or marketed to the public.

However the goal of this book is to make you a 'three-way trader'. The 3<sup>rd</sup> and last trader is revealed in the final chapter, and I believe probably the most important chapter in this book, because it describes in detail our ability and the market's ability to create wealth beyond our wildest dreams.

## **In Conclusion.**

Traders want an edge, an increased edge above the already profitable system they use. Incorporating outside influences to enhance the edge should not be dismissed even if you believe that these obscure methods are just that. I was one of those people who fell into the category that unless I knew how things were calculated then I wouldn't fall into the trap of blindly following black box models based on advanced timing. However, I'm glad I did investigate and followed the calls for many months because I began to see the same re-occurring patterns of someone else's proprietary timing tools providing an advance warning that a market turn is a possibility, or in fact providing a highly accurate discretionary tool when it conformed to what I was already using. It is the combination of those timing tools and my trading plans that help enhance my own '*window into the future*', and hopefully yours.

**The next chapter is based on trading equities and developing strategies based on the individual style of each trader.**



## CHAPTER 7

### TRADING CYCLES of TIME (Equities).

The whole purpose of this book and the methodology of AMT is providing a 'window into the future' so we can statistically shift the odds in our favour. It is absolutely necessary to have an *edge*, without an edge you can't win! Even with the strictest form of money management techniques you'll probably still end up going down the drain-hole, just a tad slower than normal. Trading stocks and trading derivatives are two totally different ball games but the same principles apply, we as traders need to wait for the most probable trading opportunities based on TIME. As much as we like to be able to trade derivatives, not every trader will suit the day to day grind of sitting in front of multiple screens trying to trade intra-day strategies, even with the most robust methodology some traders will still fail to cut the mustard because they don't continually subject themselves to the market. Trading derivatives intra-day is a hard task to master because there are so many variables; multiply time frames, numerous pivot levels, sequential open-to-close relationships and with Optimum Range bars will no doubt confuse the inexperienced trader. Trading derivatives each and every day for any trader is not an easy task and sometimes not always desired by some.

This chapter turns its attention to trading stocks as not every trader has the ability and patience to trade derivative markets. Early experiences of trading will normally sort out whether the trader lasts in the derivative game, and for the many traders who want to get into short term trading, derivatives markets might not be their cup of tea. Trading in recent years has become a lot easier for the short-term trader with the advent of spread betting, and these agencies now provide a cheap and alternate way to trade. Traders can now trade stocks in a similar way with similar rewards as trading any other derivative market because of the simplicity for buying or shorting any stock using leverage.

*We can visualize the trading opportunities through the use of Time. As 'Time' is the only know factor in the market that can be know in advance, and we subscribe to the belief time is forecastable, then its is acceptable to believe that what ever happens in the past will somehow affect events in the present and which in turn affect events in the future (chapter 1 AMT 2003).*

That is a bold statement because there is an underlining tone that the trader is trying to predict the market in advance. But is the trader trying to predict the market? Or does the trader have a total understanding of the market structure based on TIME so they can make a calculated judgment in advance with precise accuracy.

Not every trader is the same, two different traders can look at the same chart but make too different conclusions and their own individual actions will depend whether they view the current market structure to be bullish or bearish. They will trade the 'trend' of the current market, so one trader will either short the market when it conforms to his or her own methodology whilst the other trader will wait and look for a support zone and then use the 3-day cycle to confirm the change of trend.

It doesn't matter what Price is, as long as each trader has an understanding of the Market Structure of Price over TIME. How they act at each point in the market is up to each individual as long as they have identified the risk-reward and profit objectives using the variables within the book and your own trading systems, rules and plans. I can't make you the type of trader you want to be, all I can do is give you the blueprint of the best way of identifying cycles, trends and risk within the market structure based on the AMT model. This model revolves around the theory of Time as the most important variable in the market, because it's only the passage of Time that changes the markets from trending to rotating and so on.

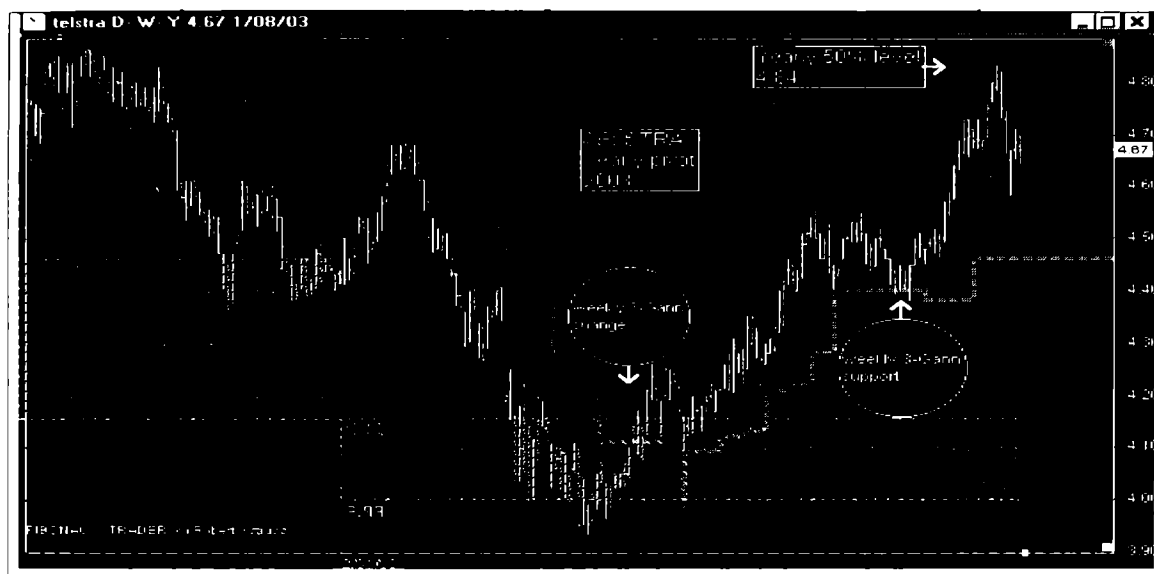
I need to remind traders that this methodology is based on repetitive patterns and the recurring phenomena of price action having a statistical probability over TIME, and I truly believe that using the AMT model can increase the edge and odds above the 50% level that most believe exists when trading any market. Each trader will have different set of rules, timeframe, stops and profit objectives so the results will vary for each and every trader, but the success rate per trade should increase if each trader subjects themselves to the market on a continuous basis. They become systematic in their approach no matter what their interpretation and perception of the current price action. Remember, traders still operate under the random distribution of wins and losses, and our dollar reward is unknown but the success should increase because of the repetition of the market over time. This will become clearer as we continue with this chapter.

When trading stocks the TIME sequences still apply, we begin with the Primary cycle (yearly) and work our way down into the 3-day cycle. We define the primary trend using the balance point and then filter the individual stock with each lower sequence of timeframes. As I mentioned before, each stock will have its own Rhythm and this will be unique for each stock traded, the 'times' and methodology will always be the same but the precise movements will differ as each different stock has its own individual cycle.

Once a trader gives himself a 'model of expectation' of the larger picture then the trader can trade to that point in time, remembering how TIME will determine the flow of Price. Any trader always needs to be reminded that the start of any 'new' timeframe will have the ability to suck price into the central zone, so for swing traders, the further price is away from the central zone at the beginning of the timeframe the better, the closer to the 50% level then Price will move away. And the 50% level of each timeframe simply defines the trend of the stock.

Personally I like the trade stocks using leverage and prefer trading on the long side as a buyer waiting for the right variables. I trade short-term derivatives so I'm not concerned about the daily fluctuations of stocks, for me it's too much to concentrate, trade, and manage a basket of stocks in a short-term manner. I prefer trading the larger cycles based on how I perceive the overall market, and I believe that I can make more money using this strategy than trading intra-day. But for others they might argue I'm missing on the potential of shorting stocks whilst others thrive on being day-traders. That's me and that is why I'm not trying to make you into traders all doing the same thing. All I'm trying to do is give you a model to trade from and what you do with it is up to you.

Figure 73 illustrates how stocks behave in the same manner within the market structure as I have described throughout this book. The Primary trend gives us our first reference, and any rotation from the extreme of the range is always towards the yearly 50% level (balance point).



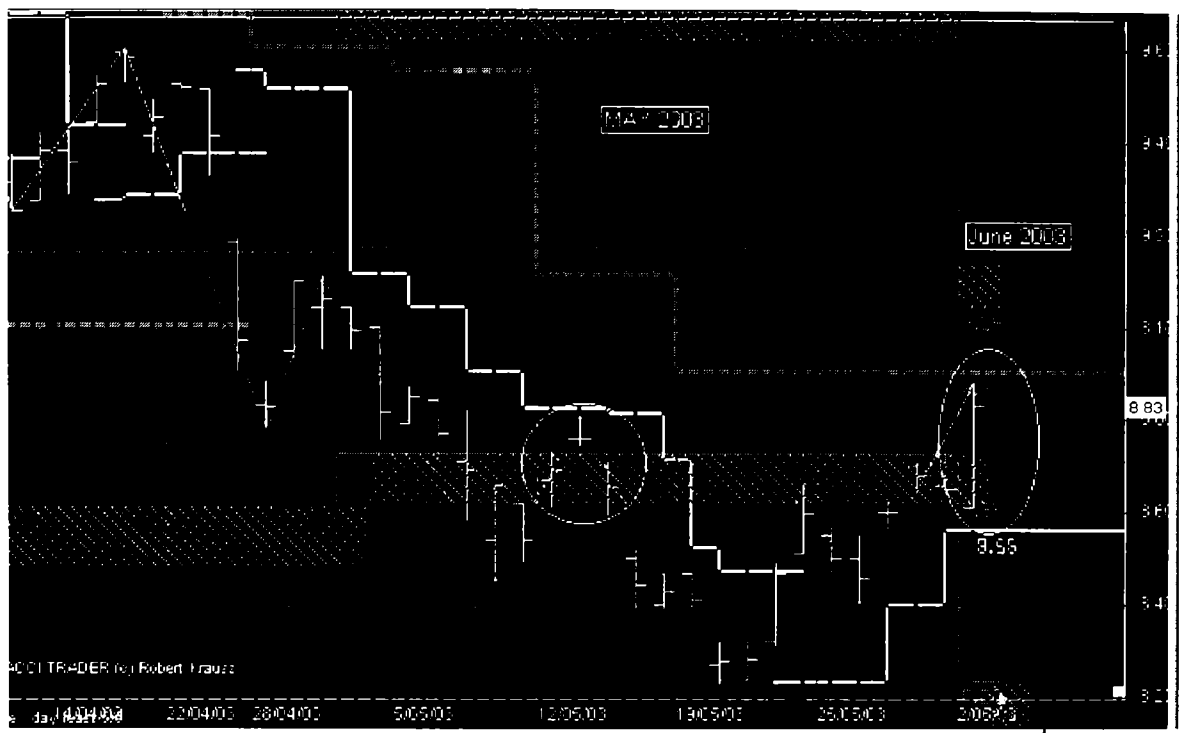
**Figure 73.**

The yearly 50% level will determine the Primary-cycle and range extremes; once we have these ranges we can filter the stock with the 3-week cycle with a 'model of expectation' for each secondary wave to move over 3-month cycles and the quarterly pivot.

For any short term trader or swing trader the open of the trading week is important because it can provide high probability trading scenarios as long as the market path of the higher timeframes are clearly defined. If price is also trading outside higher timeframe ranges, these extreme of ranges can provide the 'model of expectation that price will remain outside this range until the new timeframe begins as I have described before.

Figure 74 shows how TIME effect price, once the monthly lows had broken in May 2003, price remained under pressure; it wasn't until the beginning of the new month of June was price allowed to move higher. Price had opened at the new monthly 50% level and was immediately pushed higher.

*"It doesn't matter what Price is, as long as each trader has an understanding of the market path of Price over Time"*



**Figure 74.**

Trading stocks whether trading speculative shares, penny stocks or blue chip these TIME pivots are universal. On Page 25 Figure 7 is another example of the new higher timeframe 50% giving us an idea of the change of trend within that current timeframe. As in the above chart, the change of trend is only for the current timeframe, in this case the monthly timeframe; the question you have to ask yourself is where is the Quarterly 50% and Primary 50% level. What might be a bullish trend within this timeframe might not be in the higher timeframes, however we can still trade it towards the extremes and manage the stock with the 3-day cycle.

The 5 stages of TIME will be the backbone of any methodology we use and will be the first reference we use along with the 3-period cycles. Any trader needs to have an understanding of where Price is trading in relationship to all the five-stages of TIME; the market path of Price will always be based on TIME and the 3-period cycles.

The bane for many traders is that, how can any trader possibly trade so many levels in the market? A lot of traders who dismiss this type of analysis have failed in the past of understanding the market structure of Price over TIME and will be the first to rubbish any predictive methodology. But we need to keep in mind that not all traders are the same and each level needs understanding for each individual risk-reward trade. So a position trader will trade differently compared to a trader who only uses intra-day strategies.

*Most traders view Price more importantly than TIME. Their entry will be determined by the price that they have identified as part of their methodology that they use because technical indicators are based on Price and hence something that has already happened, then the indicator is inherently late. Most methodologies are derived purely on Price, price that has already occurred.*

TIME on the other hand is the only thing we know in that exists in the now and will extend into the future. TIME has an effect on Price and that basically means the TIMING of the Trade becomes more important than the Price traded.

*My experience is, there are 'Time Window's' in which high probability trading can be made with High accuracy, and there are times which no forecasts can be made with any degree of accuracy. If one adheres to 'profit forecasting' and risk-reward strategies then TIME needs to be fully understood in its role of affecting Price. If one can find some factor, in that TIME is forecastable, then matters on Price can be a model of expectations for High Probability Trading Scenarios.' (Preface)*

### **Models of Expectation:**

Call it Models of Expectations, call it 'the window into the future' or call it prediction, if we can use TIME and look forward in Price-Probability scenarios then our edge will be tremendous whether trading derivatives, stocks, or penny shares. For anyone who is looking to trade a stock, the trader must know what the 5 stages of TIME are, and must know where each level of support and resistance is. When trading, each trader must then make the decision themselves how each movement in Price over TIME will provide the Trader with the profits they dearly seek.

*The purpose behind deciphering the market's timing relates to profits. Who cares what the price level is, as long as you know what is going to be the turning point in the forecastable Time. And this statement is the crux to all that is trading; it doesn't matter where we trade if TIME is forecasting an extended move into the future.*

Trading is an individual thing, but trading should not only be directed to only one style of trading, whether you're a short term intra-day trader or a long-term trader, trading the opposite end of the spectrum to what you are normally used to is a must. Having a balanced trading spectrum of short-term intra-day strategies for volatile derivatives or stocks along with a medium-term strategy is something I highly recommend. There will be stocks that will fit the profiles of each and with the use of TIME you will eventually find that each stock will have its own rhythm in movement of Price over TIME

For example we can see in the previous chapter the current price action of the Market and our view of the market moving towards the yearly dynamic highs, so if the market has a probability of moving higher then we should focus on trading the using the same strategies on stocks using leverage positions.

Not all stocks will follow a similar path as the overall market but that is why we filter the cycles and trends with the passage of time and each higher timeframe 50% level. Once it reaches the extreme then we can completely change our strategy and exit all leverage positions and then wait for any pullback towards the next lower 50% timeframe level, that being the Quarterly.

When you dissect each stock over the course of a number of years you will then begin to see each stock has its own market path of Price over TIME and each stock will provide its own unique probability trading scenarios based on TIME. Traders need to adjust themselves to each individual stock they trade but the underlining methodology should always be the same, Price extending and rotating over TIME.

## **In Conclusion:**

Technical analysis has evolved because traders want to be able to define the price structure of the market and then make a 'model of expectation' about any future price move. Methodologies have evolved so that a 'model of expectation' about any future price move could be pre-determined with high accuracy. The methodologies that exist in the market have the same characteristics; cycles, waves and extended movements of past data to provide the necessary framework to profit in the market place. Elliot looked at the market structure and developed an understanding that the price action moved in an action-reaction framework, all up moves are followed by corrective moves and all corrective moves are followed by up moves. Within this continued ebb and flow certain patterns could be found that repeated itself and Elliot developed the wave theory consisting of five waves; three impulse waves followed by two corrective waves. The Elliot-wave framework has been used by many traders to define the market structure and is probably only one of a few that has been universally accepted in the market and technical analysis fraternity.

Cycles in the market have been defined by seasonal patterns or unique rhythms of each stock or derivative, these cycles exist in all timeframes and are built on the 'observed phenomenon' that events have a tendency to repeat themselves at more or less at regular intervals. Traders who use any cycle theory will normally look at the distance between the highs and lows and the span between the two and then make a calculated judgment that they will be in a better position to anticipate the next high or low. The best-known structural analyst and is probably Gann and his belief that mathematical patterns of precise movements governed the markets. The integral part of his system are the fibonacci numbers and angles of price-trend that provide a 'model of expectation' for the next top or bottom in the market.

Peter Steidlmayer developed a methodology that offered a logical and organized set of rules that defined Value. Traders now had a visual on price and time so they could arrive at an assessment of where price is at any time relative to value. The key to successful trading lies in being able to determine in which direction the market is headed and with the use of Market profile traders now could develop an assessment of when price is above, below or at Value. These three methodologies are the backbone for most that analyse the market today,

Most models try and define the trend, try and define the Value, and try and define where price is headed using mathematical equations of past data. Whether it is Gann, Elliot or Steidlmayer their methodologies provided a discretionary definition of past price action so traders can develop a 'model of expectation for the future. The universal component to all three was TIME. Time of length defined the trend, Time of distance defined the cycle, and lastly, Time of price defined the Value. The only problem with these methodologies I believe is that there are curves fitted after the event. Most 'forecasting' methodologies are based on Range of Price and fibonacci expansion techniques using a multitude of fib ratios. Whether it's Elliot Wave, Gann, Geometry or whatever they will use the past to project the future. They will argue that there is a 'Time' element, as in, Time and Price, but in reality they are only curve fitting this component to suit their methodology.

They will say... "*Time between this Peak and Trough will project this future move*"... but they have no idea when the peak or trough begins or ends until the market actually retraces a percentage fib ratio and then they will readjust their methodology based on the past once again. I should know, I spent many years working with those methodologies but got frustrated because of the lagging factor. When you frequent many forums and read market calls from traders using those methodologies or especially from well-known forecasters and newsletters, they have hopelessly called the bull market. I personally got lost on the many 'tops' in the market they were calling and traders trying to pick tops along the way.

The major problem I see why they have failed or most methodologies fail is because they are so fixed on trading one timeframe, that being the daily timeframe. They very rarely use the higher timeframes. What might look like a textbook wave analysis on the market using daily ranges might not on the weekly, and so on.

The AMT methodology is based on Time and then Range of price. Whenever a 'new' timeframe begins a new dynamic range is defined, no matter what price action has occurred in the past. We begin from the Primary trend (yearly) Secondary (Quarterly), Monthly (intermediate), Weekly (short term), and lastly daily.

These components are what Elliot and DOW spoke about many years ago but very rarely used by the multitude of traders. When I first started speaking about higher timeframes years ago the majority of T/A traders would never have taken a second look at using those higher timeframes.

I think the big difference between most forecasting techniques is, they are fixed on price completion or targets based the past, a 'static concept'. They will argue it's dynamic but in my opinion they are not, because it based on the past, something that has already occurred. The AMT model is based on TIME, something you forecast in the future, i.e. the beginning and end of each timeframe.

Now all methodologies including mine are just guides, nothing more nothing less. But one thing is I'm not fixed on 'Price' to make certain trading decisions, I have an understanding of cycles in the market, when to BUY, when to go CASH, when to take PROFITS and as importantly when to take losses.

This book has provided a working model of how price will trend within the market structure defined by TIME, how price will cycle with the use of 3- periods of Time, and how Value is defined by the of the central points of TIME. More importantly, this book has provided a 'window into the future' using Time and math.

The key to successful trading lies in being able to determine the direction of the Market, and with the use of Time and 3-period cycles the trader is now able to provide a working model of the markets and the framework for the action-reaction of Price, something that Elliot theorized.

I have made reference to these three methodologies for a reason, if these three methodologies are universally accepted in the market place then any working model needs to define the trend, define the cycle and define the value within each Timeframe, providing the trader with a model of expectation for the future. The trend as defined by Elliot & Dow...

*"Wave analysis based on a series of waves and counts developed by Elliot and DOW are primary examples of cycles within the market place. Dow Cycle; the three basic movements in the market are defined by, the Primary trend, the Secondary Swing in the opposite direction and the Minor Trends, or the day-to-day fluctuations within the Secondary Trend. The Primary Trend lasts at least one year but may last for several years and consists of a series of broad wave-like movements that are interrupted by secondary reactions"*

The yearly pivot ranges define the Primary Trend in the market, more importantly the 50% level will provide the visual reference for the market with the view that Price will move towards the extreme of the ranges, and outside the extreme of the yearly ranges the Trend is strong. The quarterly pivot ranges define the Secondary trend in the market and again the 50% level of the range will define the strength of the trend with a defined goal of price moving towards the extreme of the ranges, a break of these ranges and the next reference will be 100% of the Quarterly timeframe. It is very important that these higher timeframe ranges need to be defined and a 'model of expectation' developed so that Risk is clearly defined. Different strategies need to be applied when trading against the trends of higher timeframes, so traders with a model of expectation of going against the trend need to apply different money management techniques and short-term strategies.

We have defined the Primary and Secondary trends of the market structure, now we need to have clearly defined cycles within each level of Time. These cycles are clearly defined by the 3-period cycles and will provide the trader with the necessary information of the strength of each cycle.



The cycles will provide the visual reference for support and resistance, will also provide the 'window of opportunity' based on the 2-phases of any cycle change for swing traders, and will provide the necessary framework to have dynamic levels in the market so money management techniques can be adjusted and entry levels clearly defined. All cycles will be clearly defined and models of expectations provided for price to move to the extreme of the higher timeframe ranges and from these levels back towards the central points.

The action-reaction or the extension-rotation of Price is based on TIME. Time is defined by the calculation of  $H+C+L/3$ . As Time is the only thing that moves forward in the market then TIME needs to be calculated and projected forward. The cycles of Time are clearly defined with the use of the 'floor-traders pivot points' and will provide the trader with a 'model of expectation'. If price is trading outside the extreme of a certain pivot range then a model of expectation can be made that price 'can' remain outside that range until the timeframe ends.

Figure 75 shows a clearly defined target and model of expectation after the lows in the market at the 3-month dynamic range lows in March 2003. The open of the quarterly timeframe and 50% level, 2893 (left-chart), provided the model of expectation within this quarterly timeframe to make its way towards the yearly 50% level of 3131

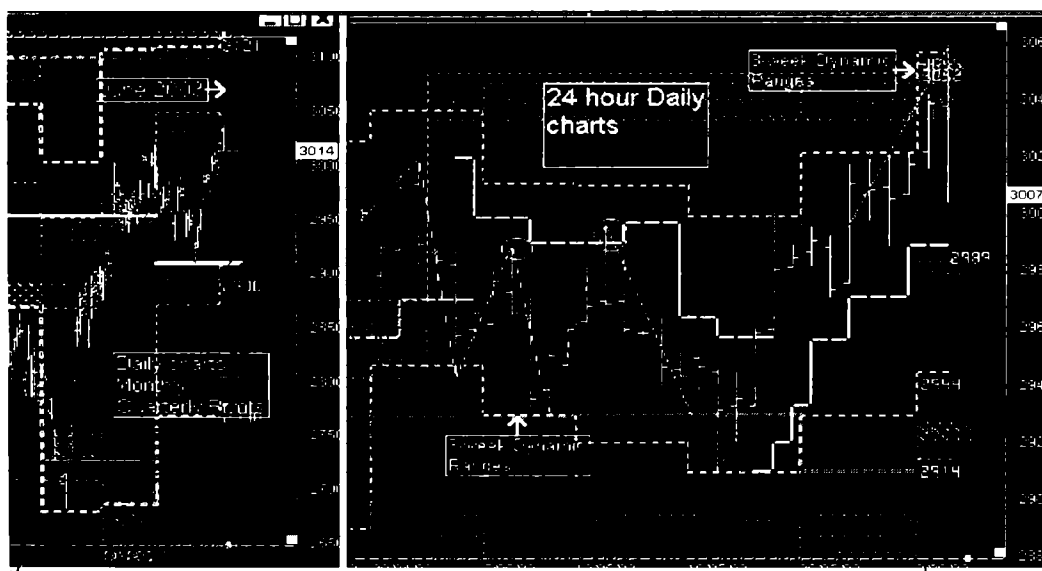


Figure 75.

Within each trend and cycle are waves of Time, these waves of Time are defined by three-periods and project forward using the same calculation to project any time frame forward. The optimum cycles can be found using the 3 period dynamic ranges of each higher timeframe. If our model of expectation is for Price to make its way to a certain level based on our 'model of expectation' then each dynamic level can provide the necessary information to provide profit objectives and/or entry levels in the market for swing traders.

These dynamic levels provide the necessary framework for traders and their understanding of the extension and rotation of price as it moves towards clearly defined zones in the higher timeframes.

The chart of the right (figure 76) shows the waves of the market within each monthly timeframe as it makes its way towards the higher target. Each 3-week dynamic range provided the waves of price and the extension and rotation of Price. Each 3-week dynamic range defined the speed of the movement and also defined the risk-reward of each movement. Traders can now clearly define where price is likely to move towards and stall before the next timeframe begins. For traders this is important because it provides the precise movements of price using math, something that Gann inferably believed the market operated under.

Value defined by Steidlmayer allowed traders to make assumptions that the price they trade is fair value in relation to the market structure. Value defined by AMT allows traders to make assumptions of the market structure in advance with high accuracy. The big difference is that, Market profile was not a working model to trade from but only a reference for the most traded price. AMT provides a model to trade from and clearly defined areas of the market that can provide the Value areas of the market before they form value. These value areas are the dynamic central points of the higher timeframes and traders can now make assumptions of price in reference to these levels. If price corrects itself within the timeframe from the extreme of the range then the market path is for price to move back towards the central zones of the timeframe. If the market extends with time and math, then math will provide the value areas in advance. These value areas will normally be clearly defined by the 3-period cycles, so that trading from these central points towards the extreme of the range would be a robust methodology for any trader.

It has been proven that the market dynamically rotates within itself over time using the 'least square' indicator as described in the chapter *sequential data and the single cycle day*, so traders need to find ways to trade these non-linear markets that now exist using the example of Time-Price probabilities.

One of the most complex indicators in the market is the least square or SINE wave, but it is also one of my favourites when used as a Timing tool for price reversals after a trending period, and it also provides a valid reference point for price to rotate towards. It has to be the only stand-alone indicator that I know of that can make money continually in the market. The least square indicator is the backbone of any mechanical and automated system I use. Even as a visual reference for traders the least square can provide a very powerful add on for any discretionary trader who is averse to running positions without stops. Because these systems have no relevance to Price then a trader can make his or her own robust system around what the system is telling the trader, the trader makes their trading decisions in line with the alert the system provides.

The ultimate goal in trading is making money and the only way to make money in the market place is to have an edge.

*“The purpose behind deciphering the market’s timing relates to profits. Who cares what the price level is, as long as you know what is going to be the turning point in the forecastable Time. The methodology of determining Risk-Reward should then only be based on TIME. The use of these Time pivots is universal in all equities and derivative markets.”*

And that statement is the crux to finding the edge in anything we trade, as long as we know what is going to be the turning point in the forecastable time then our risk-reward will swing in our favour. Whether you are trading a volatile stock, derivative or ‘small-cap’ each will have its own Rhythm and each movement will have repeatable patterns.

The patterns using price, and some thing inherently late that most traders use in their analysis have now been replaced by repeatable patterns of TIME based on cycles and extended ratios of TIME.

Once these patterns have been found then the opportunity to make money for each individual trader will always be there!

**The next chapter is based on systems development, why trading non-linear markets and trading against all ‘trends’ with an expectation of the market rotating back towards a central point can be profitable and rewarding. The chapter takes what is within the book and then automated providing mechanical systems that catch the ebb and flow of the market dynamics and the core theory of the AMT model when trading derivatives.**

**Note: For an extended version of the chapter 7 please go to the CD marked Chapter 7, ‘Equities: Trading Cycles of Time’. The file on the CD was part of the original book in 2003 will take you step by step with some individual stocks that I trade. I recommend you continuing with the book until the end and read the file at a later stage.**

## CHAPTER 8.

### Mechanical systems; system development:

#### Analytical Market Trading hard-coded systems:

Derivative markets have a natural flow to them, now whether this is due to the flow of buyers and sellers or from the function to organize itself through the use of computer-generated systems is debatable. The more time you spend in the market place the more time you will see the same patterns occurring, and the closer you look they will occur usually in the same areas of past data. We know the market is dynamic, we also know the market moves in waves of 'TIME' and these smaller waves inside the larger cycles occur to frequent to even suggest that the market is random. If the markets have moved beyond the notion of price being facilitated in the market between two parties, to the facilitation of Price over TIME, then there has to be a statistical edge of past data whether we like it or not, and this is the core belief behind the AMT methodology.

Most traders need to find an edge! That edge in my opinion, is trying to determine the mathematical sequence of past data and the probability of the market rotating and extending within each TIME cycle. The basis of all mechanical systems is then based on this theory, or trading with the expectation of price rotating back towards the central zone if trying to develop short-term intra-day trading systems.

We capture the ebb and flow of the market and trade against the trend of the 'TIME or Range' we observe. This goes against, and totally opposite to what most other systems operate under. Most other systems wait for confirming variables to trade, i.e. breakout or price indicator confirmation. AMT takes the opposite approach, we BUY when price is falling and SELL against the trend when rising. All with the expectation that price will rotate towards the dynamic central zone that has been described in detail throughout the book. A true contrarian-trading model!

AMT clearly defines the market structure using TIME, Range of Price, and Math. It also defines the market trend based on the 3-period cycles that clearly define profit objectives using statistical price action and Optimum Ranges. This is the basis for all AMT mechanical systems when trading the SPI (Australian Futures), as I will describe as we continue with this chapter.

Most traders find it hard to understand the concept of the market continually rotating as Time moves forward. The dynamics of the market are bounded by TIME, as Time rolls forward so does the market, however, when you look closely at the dynamics, price is actually rotating within itself, and if this is the case we need to develop systems that are able to capture this phenomena...

*"The argument though, is that, the market is non-linear, it provides the perfect environment for rotation to flourish. A discretionary trader trading the smaller daily cycles or an intra-day timeframe essentially trades against all trends, short, medium or long.*

*The reason she trades against all trends is that, she expects prices to rotate back to some central point. If the market spends more time rotating within itself and making extended moves as time moves forward then combining the two concepts would provide a very robust methodology. The combination of the two has the potential to form a predictive model with a high probability of success.” (AMT book 2003)*

## **Core beliefs and theory:**

Before I continue I want to remind people the core beliefs of AMT. I make a clear point in my book that these beliefs have come about through years of experience and good judgment. Like most people’s core beliefs they usually stem from the experiences and judgements they encounter and make throughout their lives. Whether those judgments are good or bad, the same outcome and results still manifest in a way that it can either help or hinder their own individual results. I make a strong point in the book early...

*“Whether a trader who uses complex forms of Fiboancci numerology or a trading psychologist, their experiences and observations in the market place will be the backbone of their theories. If one has failed in trading terms trying to predict the direction of the market, then his or her bias will be, that no one else can! If another trader successfully trades using Elliot wave, which revolves around the theory of the future direction of the next wave, then their view of ‘probable prediction’ will have a place in today’s trading environment.”*

The forums I visit are littered with numerous theories on trading, sounding more like ‘trading psychologists’ than actual traders and very rarely providing any worthwhile information. The rhetoric from ‘trading-marketers’ is just like the numerous books and websites that spew the same mind numbing information that is continually hashed and rehashed again and again about technical analysis. I read websites and books and feel like screaming sometimes because they very rarely are able to give traders what they want. I believe traders are looking for ‘observed patterns’ that have a statistical edge so they can define ‘Market Risk’. Most technical information that is marketed and sold to the public for thousands of dollars is always curved fitted to suit the current price action after the event, and most of the methodologies that I have spoken about in the previous chapters fall into the same category. It’s a false hope and a fool’s paradise to believe that any of those methodologies are worth the money that they are sold to the public for.

The purpose of the AMT model is to clearly define Market Risk before the event based on dynamic patterns of Time. However most believe this isn’t possible. I, on the other hand want to know the statistical movement of each price wave before RISK is increased, and as importantly, when price is likely to rotate within itself as the market dynamically moves forward. The purpose of this chapter is to use the AMT model and develop hard-coded mechanical systems based on this ‘rotation phenomena’ that was previous discussed in Chapter 5.

So how would others normally define RISK? Normally they plonk the same core belief like sheep in a herd... 'Use tight stops' without giving any reason why and when tight stops should be used. Market Risk and individual Risk are two separate things altogether and traders need to understand this.

I have never been able to find a book or any information that can clearly define the dynamics of the market. Very rarely can you find a clear example of developing a simple equation or model that defines market dynamics and why it is necessary to do so. Market dynamics must be calculated because market dynamics defines RISK. Risk based on the statistical re-occurring phenomena of price movement. Once you can understand this or more importantly able to develop and calculate the dynamics of the market based on these three components, Math Time and Price, then traders should be able to then have a better understanding of where and when stops should be placed, especially when trading derivatives. Do a search on '*market dynamics*' on any search engine you will be bombarded with a plethora of sites all with different versions of what defines dynamics. Theory and rhetoric clearly outweighs anything that mathematically formulates market dynamics and even when you are able to find anything resembling Math they fail dismally in developing a model that has any statistical edge, or able to provide mechanical systems that capture the rotation of price as Time moves forward.

**The Core theory of AMT is the facilitation of Price over Time**, the rotation of price towards central zones as TIME moves forward. As I have previously described many times before, Time is the only thing that is 'forecastable', once we are able to calculate this then we begin to see the statistical patterns appearing on a regular occurrence. How each trader trades those patterns is then up to the individual, however the patterns will always be the same for everyone, we are all able to judge Market Risk based on historical evidence that has a statistical tendency to act in a certain manner, or more importantly a precise manner.

I also believe the human sentiment that once drove the market have been replaced by computer-generated systems used by large hedge funds. I also believe that why trader's fail when trading derivatives is, they have little understanding of the model of rotation and extension of TIME and Price, they prefer trading using 'breakout' systems and using tight stops, or in reality they haven't defined the Risk within the market structure. All they have done is defined RISK on an individual aspect. Market Risk is completely different to individual Risk.

The philosophy of AMT is to trade in a systematic way that has a statistical edge. AMT wants to be able to statistically define RISK in the market place and have clear defined profit objectives. AMT is about trading RISK in a statistical manner; when do the odds have the potential to swing against any position we are holding. Knowing in advance that we have a statistical edge. The whole trade is based on the entry and exit that has a statistical edge with an optimum EXIT, as I will describe in this chapter.

I'll keep on harping on about this because this will be the only way to drum it into the heads of trader's who are so accustomed to trading their way for so many years and anchored to their own beliefs.

Those beliefs can easily be a hindrance when trying to step outside the square and thinking differently to the herd. I continually see the same herd mentality when reading most forums as they fumble their way trying to develop short-term derivative systems.

Thinking outside the square... well how about removing STOPS all together. In my opinion, one of the worse things when trading derivatives is using tight stops, but don't tell others because they'll scream and let me know I'm an idiot. Why remove stops when every trading book or educator says 'use tight stops', but at the same time, why is there such a high failure rate amongst short-term futures traders. Somewhere things aren't going to plan no matter what they do, what they read, or what seminar they attend. It's just not working!

I'll get onto this later however most traders will be fearful if they ever did remove stops for every trade they took. If you are trading 'breakout systems', yes, stops need to be applied when trying to catch the new trend, but AMT is not all about catching the new trends, AMT is about trading against the trend using mechanical systems based on statistical patterns as the market dynamically moves forward, this is when stops are hazardous to any system especially short-term intra-day trading.

In all my testing of derivative systems that can be mechanically back-tested I have not been able to find any 'short-term' breakout system that can statistically perform at the level I desire. This goes back to my article regarding the 'numbers game'...

*"So if you want to be a day-trader then you need to develop a system that is able to trigger more than once per day because if your first trade is a loss and the system doesn't trigger again then today you won't be paid. The whole idea of being a day trader is making sure that you do not have a losing day, so you need to make sure that over the course of the day the system is able to generate the numbers and trades that return the positive expectancy we want to operate under and give us the dollar reward we seek"(Numbers Game).*

Personally I haven't been able to develop a mechanical system that can generate those numbers when trading short-term derivatives in the manner most other traders would trade, that is 'break-outs' or using lagging price indicators as their conforming tools. In all the forums I visit the same applies, you would very rarely find any system that can generate the numbers for intra-day trading. I'm not saying it can't be done, I'm saying in my experience I haven't been able to find anyone who has. I'm not saying there aren't those systems but the occurrences are too infrequent for short term trading, and most of those systems do not provide the numbers. Yes you can make money trading breakout systems, however those systems very rarely take into account the many variables in the market that define Risk. Most of those systems are individual risk assessed with the axiom of 'let profits run'. That is fine for many but not for me.

# Market RISK

Market Dynamics defines Market Risk, where the most likely point in the market where statistically there is a phenomenon of the market stalling and/or rotating. Why does the market reverse at certain levels with high regularity is something I cannot answer without guessing. However, these precise movements in the market occur too frequent to suggest the market is being driven by human sentiment. More than likely they are the ones left buying the tops and selling the bottoms.

Market Dynamics using AMT has been identified and calculated using the Math & Time. The dynamics or structure of the market falls into two different cycle categories, the Cycle and the Path. The cycles are clearly identified using the 3-period cycle or 2 trailing continuous bars as I have described previously, a break of this zone and we 'can' identify that a new trend in the opposite direction is more than likely. This is a simple model of a breakout reversal system. We have seen that once a reversal occurs that trend more than likely moves towards the dynamic 3-period extremes (weekly/monthly), it could happen in 1 day or over a number of days.

What happens when price moves towards these extremes, statistically the market can stall and reverse. This again has been shown throughout the book that was written in 2003. These same phenomena occur with high regularity, however will it continue in the future? Nothing is ever guaranteed yet it still continues to this day.

I started this chapter in May 2004 because I wanted to write the article based on the market dynamics and introduce mechanical systems that have been developed from the core theories of AMT. All systems are based on Tick data and the phenomena of rotation and sequential data, however each system can only handle around 10,000 minutes of data or approx 2-3 months, so it has taken a while to capture the information so I can clearly describe the mechanics of system development and the market dynamics that has been developed by myself.

I have identified our first level of RISK at extremes based on TIME and Math as shown in figures 1, & 2, and also shown in previous articles. If you follow these articles based on Market dynamics that I have released; part 1, part 2 and part 3 (Chapter 9), these articles are moving forward chronological so people who are reading this become familiarised with the AMT methodology and how the market evolves and develops over the course of TIME. Our 2<sup>nd</sup> level of Market RISK is based on the 3-period cycles or change of trend, and describe many times before.

Figure 76 & 77 illustrate the market rotating and extending as each higher timeframe maps out the market structure. However, we can clearly see where price is more than likely stall and reverse, and in previous chapters we can also see the initial rotation back of a double R9 (approx 18-27 points). Figure 76 is the map of the 3-week dynamics, or taking the past 3-weeks thus providing the probable path for the following week.



The same occurs for the monthly timeframe. These extremes statistically define market RISK, only when price is able to close on the Timeframe (day) outside the range does it constitute a breakout of TIME, and then there is a statistical expectation that price can remain outside these zones until the new timeframe begins.

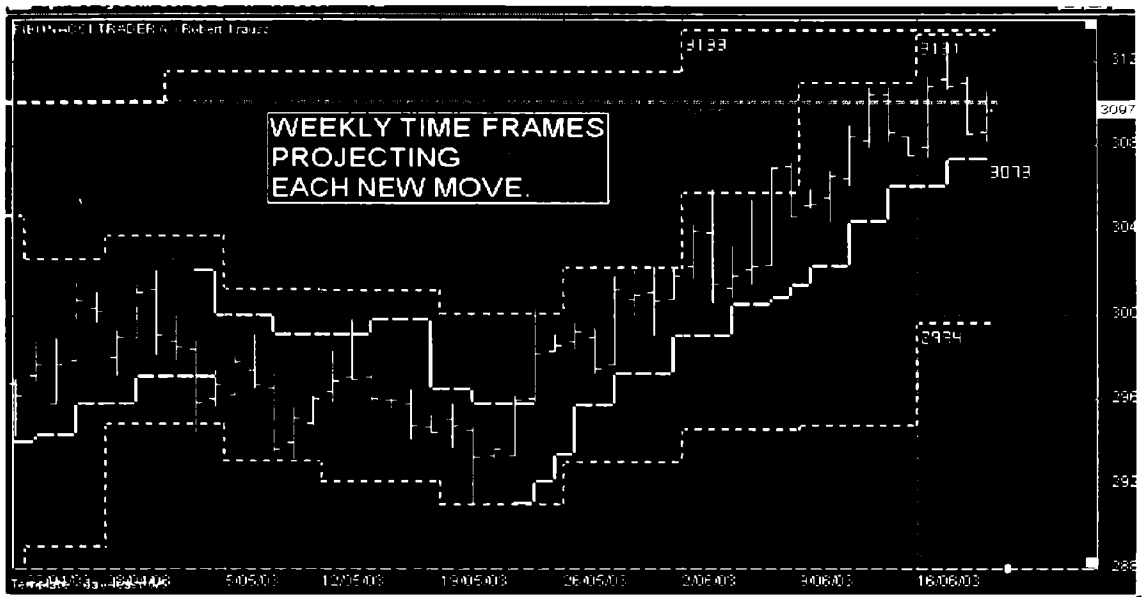


Figure 76.

We can see Figure 77, the break of the 3-week highs (green 3438) and moves towards the next high at 3504 in the new week, and more recently, breaks the 3-week lows of 3534 and then moves down to the new 3-week lows of 3496. That is what I mean about breaking the range and moving into the extreme of the new dynamic timeframe as a reference.

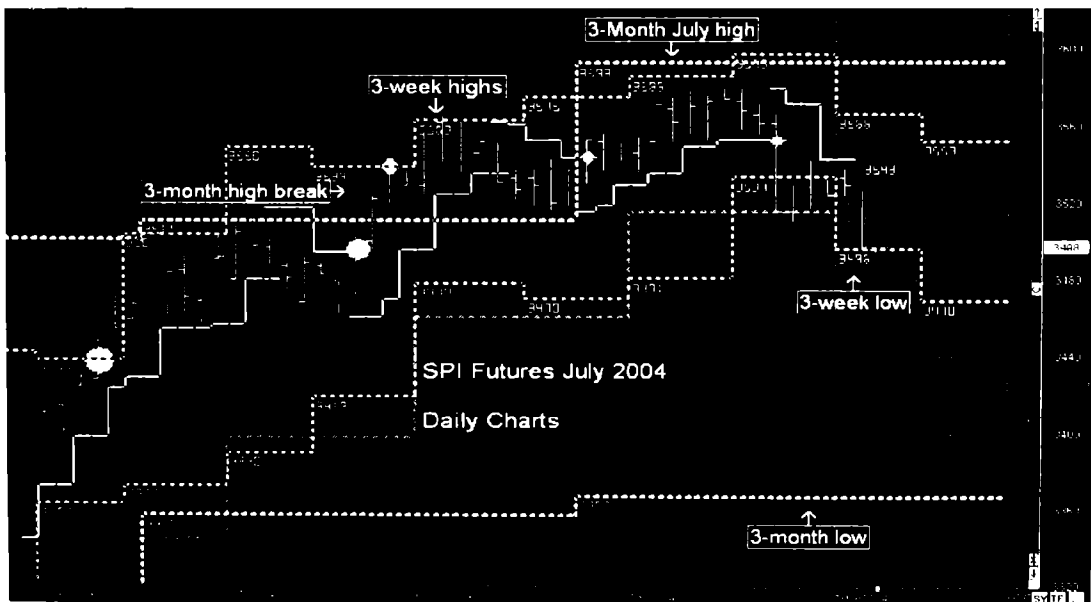


Figure 77.

The AMT model and the role it does in defining the market structure can provide profitable trades, using both the breakout of the 3-day cycle and change of trend, or reversals from extremes back towards central zones as long as there is no confirming break of the extremes, and once you identify each statistical reversal range, that can be determined by the average true range currently 27-30 points on the SPI.

Even when we look at stocks the same applies however each will have its own unique market structures. It clearly gives a probable target once a confirming cycle change has occurred, once that extreme has been reached Price has more of a chance of stalling before a new week/month provides the next step into the future, again providing the dynamics and market structure for traders for them to define Market Risk and as importantly Reward when trading a 3-period cycle 'break out'. The further away the higher return per dollar within the timeframe in question. Risk is less; reward is increased based on historical price action providing a probable future 'path'. Any trader that uses this methodology can structure their own system based on this, or depending on the size of their trades use multiple exit/entry strategies whilst the 3-period cycle clearly defines the strength of trend as it moves towards the extremes of the higher timeframes.

However, this suits the medium to longer-term trader, someone willing to hold positions for more than the length of the trading day and traders who are more inclined to trade 'break outs' towards extremes. It still isn't enough for traders searching for systems that are able to trigger the amount of trades that would suit a short-term trader who desire making a living out of short-term derivative trading on a daily basis.

AMT has previously illustrated this as a discretionary model that can be traded in a systematic way when trading these 3-period cycle breaks towards extremes, or when the 'timing dates' conform to AMT methodology.

## **Statistical Phenomena and Risk.**

Statistical patterns are occurring in the market constantly, the movement of price within a dynamic market will always have some form of ebb and flow based on the movement and direction of price. My favourite is the optimum range bar or the statistical movement in one direction as I have previously described. Within the market structure these 'range' bars are continually evolving over numerous lengths, however one will always stand out, and when closely looking at the SPI the directional Range of 27 points is the one that shines brightly.

The phenomena of the market moving in 27 point waves astounds me constantly and provides a clearer 'model of expectation' than any SDC cycle will provide. I mentioned trader's need to keep an eye on how the R27 behaves because for intra-day traders the same Risk assessment must be applied. Once the market has completed any R27 there is a high statistical probability that price can 'stall' for hours or even reverse. It is up to the individual how they treat each r27 completion; one trader might use it and exit a trade whilst another trader might want to try their hand at using this extreme as an entry point back towards the central zones using a 9 bar reversal as explained previously.

Once the 3-period cycle breaks using the same technique as the daily cycle, that is a break of the past 3x27 points, we will normally begin a trending movement in the opposite direction with a clear initial target of 27 points on the first day with the clear target of the 3-week dynamic ranges as shown in figure 76& 78. It is actually a cleaner break and trend movement than any 3-day cycle change. A 3-day cycle change can stall for 2-days before heading in the trend direction towards the outer extremes or even 'fake break'. The 3 period cycles on the R27 will normally break and move towards the next 27 points without a pause. If the R27 and 3-day cycle change occur at the same time then the movement will trend, if the 3-day cycle change occurs without a R27 break then there is a more likely occurrence of a 2-day stall before continuing.

If traders believe in having profit objectives as a road to ruin, as some will say, 'let your profits run' then that is up to the individual. At this stage I'm only highlighting statistical patterns in the market that help any trader assess Market Risk. If trader's don't believe in trying to make expectations regarding Market RISK and believe this is a 'form' of prediction then I don't think the rest of this chapter will be much use. I'm only trying to get traders to step out of the square and get ahead of the pack...

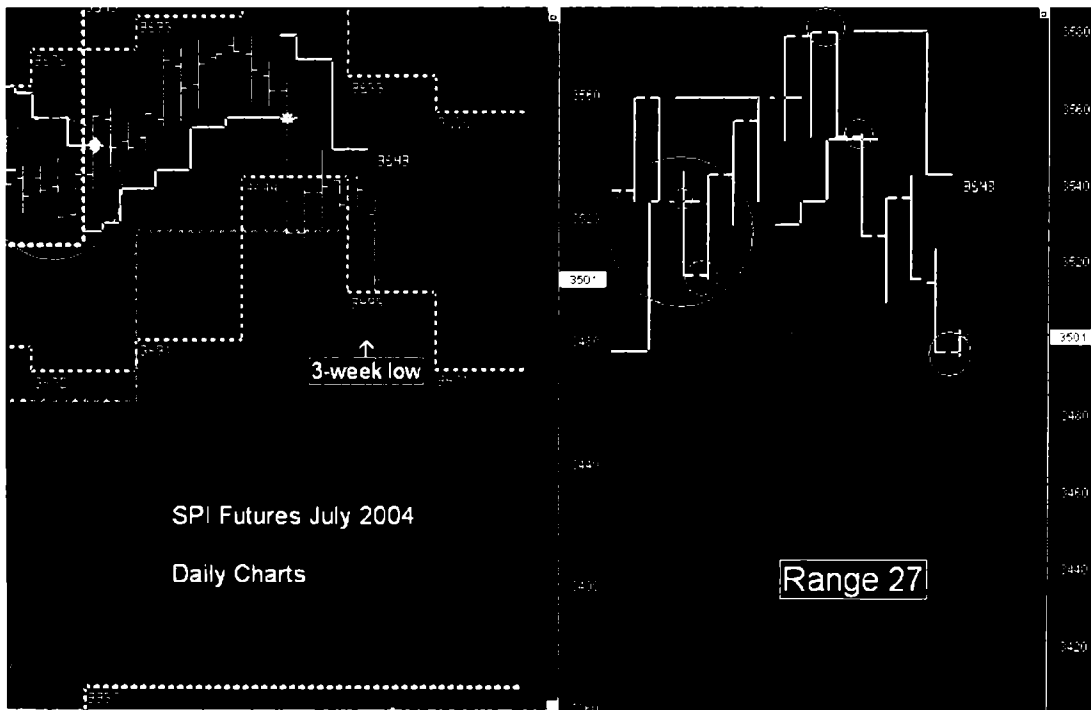


Figure 78.

When you closely look at most market reversals they can occur once an r27 is completed. We can see the numerous reversals in the market; firstly there is the high at 3562 in the right chart above, a break 3-period low of 3516 (r27 low), reversal then high at 3580 (r27), and once again a break of the lows of 3552 and movement down. We can compare price action with the Range chart with the daily chart on the left and we see that the 3-week dynamics lows of 3496 (green) is matching the r27 on the downside.

It is a phenomenon that all of us can use and exploit. It clearly defines RISK and Reward in many ways, whether you are a day trader or someone wanting to jump on any breakout and onto a new trend. Each day-trader should come into the market with a model of expectation of assessing RISK and Reward based on the statistical movement of Price over Time. The further away from the market dynamics extremes based on higher timeframes (3-week & 3-month) the more likely it will stall for 'hours' before heading towards the extreme. A complete reversal will occur the closer you are towards these extremes as long as you first filter it out with a R9 reversal bar, discretionally using any R9 reversal as a stop or trailing stop.

For example, if there is a R9 reversal and you enter the trade in a systematic way your potential for reward is still 18 points for the completion of the bar, if you run a stop at the r9 again then your profit/loss ratio would run at 2:1. I've already shown previously (small sample) that there is approximately a 73% probability that the 2<sup>nd</sup> bar will complete and then move into the R27 completion. I said the 2<sup>nd</sup> bar will complete, normally it needs a minimum 3 bars to complete the R27 move. If you are trading with the 3-day cycle range and trading with the trend then the probability of the completion is higher than trading against the cycle/trend.

## **Short term Derivatives and Systems development.**

The market path is governed by TIME or the past three periods and projected forward using simple math. Yes, simple math! Why do we want to project TIME forward, because TIME is the only thing in the market that is forecastable, once we are able to provide the math then we can statistically identify RISK and Reward based on market dynamics and Range of Price.

There is another phenomenon that I found based on the sequence of central points of the past 3 days and 5 days of trading. This came about because I back-tested years of intra-day data and manually documented the statistical information of each price movement in the trading day starting from 1999. It was a laborious task but I began to notice that the market moved in a precise manner and in optimum time periods with a high statistical probability. The moves were occurring in the same place and at the same time in a dynamic market.

The book has already shown you a part of this statistical movement and how the methodology of AMT came about, but it was the intra-day movements based on these daily sequences that were the most exciting part. The statistical behaviour of each day behaved in a certain manner when comparing the open and the historical price action of the past 5 days. However, this is not about trading breakouts, this is about trading against the trend and using mechanical systems. I have already described trading in a systematic way using a discretionary method, that is, the breakout toward extremes and also trading reversals from those extremes as long as you can identify the statistical reversal from these zones.

However, it is still NOT enough, this occurs to infrequent to be able to continually subject ourselves daily. We want to subject ourselves constantly in the market catching the ebb and flow of the market. We want to be trading Short and Long, and if the variables conflict then holding shorts and longs in the market at the same time is something traders need also consider. This is where Stops become hazardous when developing short-term systems.

### **So what is the core theory behind the system?**

It is based on the concept of what Market profile tries to theorize, statistically returning to the most traded area, however Market Profile is based on Price, something that has already occurred, and is inherently late. When we use central points of Time and do the same thing then the market is actually evolving dynamically, or **The Core theory of AMT and the facilitation of Price over Time**, the rotation of price towards central zones as TIME moves forward.

Reading chapter 5 and 'Sequential data' gives you examples of the market behaving in a statistical manner, allowing ourselves to have a view how the day 'could' unfold and pre-empting the trading day, whether the day has a bias of Up, Down or whether there is a statistical bias of the market reversing from 2.50pm onwards.

### **SYSTEMS.**

There are two forms of phenomena; one is the 'Observed' and one is the 'Coded'. All the previous examples of these breakouts towards extremes are 'Observed phenomena' that statistically occur on a regular basis, yet how much I try and code this, I'm not able to develop a pure mechanical system that is able to take into account all the dynamic variables due to all the higher timeframe variables. However, it is still a recurring statistical pattern that does occur that I can use as a discretionary model. Take my word for it, it occurred in the past, it occurs now and I'll make the calculated guess it will continue to do so in the future.

Even when we look at the trending market that has occurred since bottoming out in August 2004 until now we can still see the familiar patterns occurring, the movements towards the 3-week dynamic highs whilst the 3-day cycle is clearly identified. Figure 79 shows the market breaking each 3-day cycle and moving towards the 3-week dynamics as shown in green. Once price reaches those levels MARKET RISK is increased, as there is a tendency the market will reverse an R27. We have identified zones where RISK is increased or a statistical tendency the market can reverse. Traders have again a clear defined target based on any reversal as shown here and shown in previous articles.

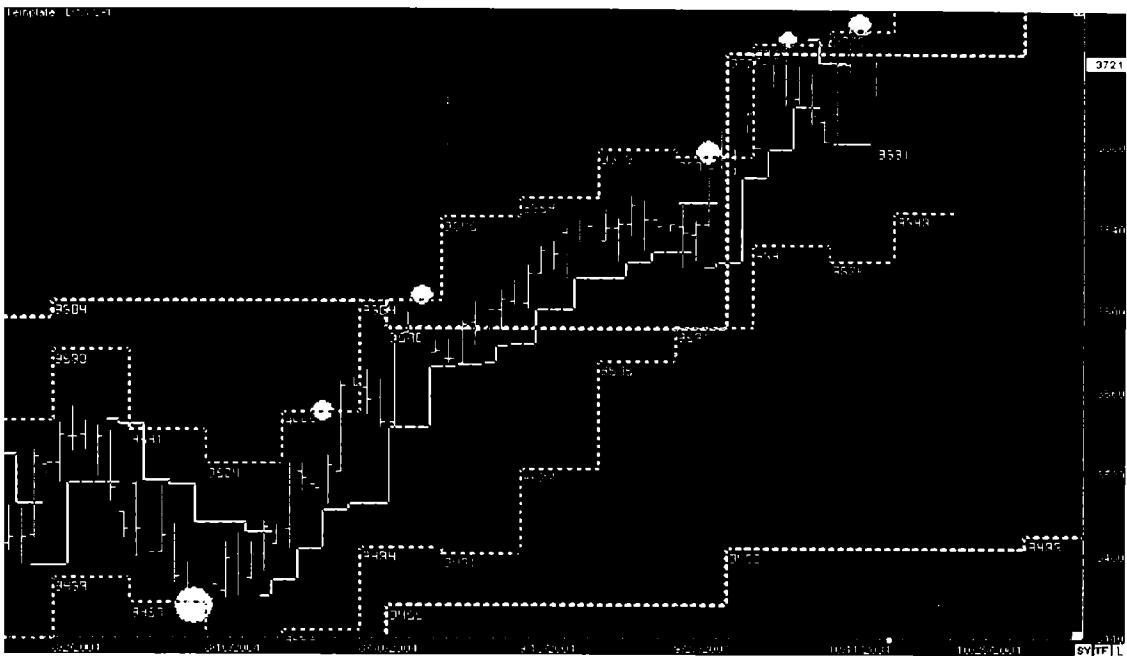


Figure 79

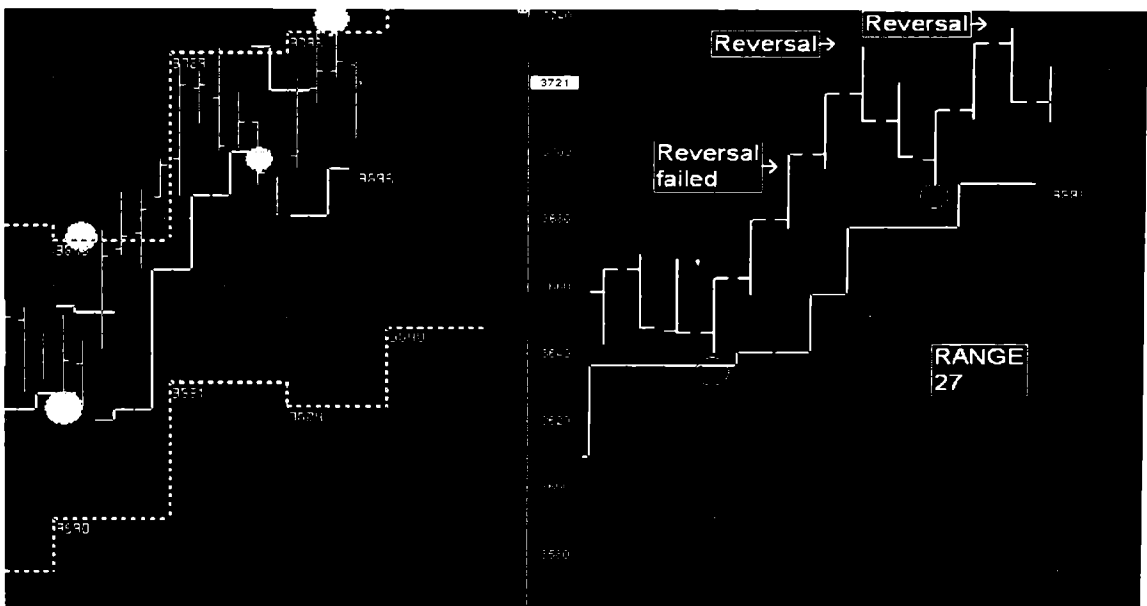


Figure 80.

When we look at Figure 80 we can see the break of the 3-day cycles on the daily charts of the SPI on the left, but on the right the 3x27 remains a buy, both cycles haven't lined so the potential of a reversal or 'fake break' can occur. We can also see how each R27 reversal will normally move into a double bar in the opposite direction before the 3<sup>rd</sup> bar reverses and continues with the trend based on 3-period cycle. We know the market is bullish because there is a breakout above the 3-monthly highs in September 2004 (contract expiry month once again) moving towards the new highs in October before stalling once again.

Have a look at where we are currently trading, we are trading now in October 2004 above 3700, however on page 119 and figure 72 it shows our ultimate target in 2004 was 3645 using the 3-period dynamic range on the yearly timeframe. If the market on the last day of the year closes above 3645 then we have the exact same expectation that price will follow the exact same sequence of events... **a breakout moving towards the new timeframe extreme.** It is the close of the timeframe that confirms the break. All this price action is still an 'Observed Phenomena' that occurs regularly and is discretionally applied to one's own trading, as long it conforms with your own individual variables and rules. But what it clearly defines is Market RISK based on re-occurring patterns of Time and Range.

**Note:** I recommend anyone who is trading any derivative market to find out the average true range of what they trade. You should be able to get this information from brokers or some trading forums and find out the statistical optimum range of the market. Once you have this, then you can begin to filter out the market and work your way down. The Optimum range will help you define and track 'Market Risk' based on the statistical movements of Price of Range within the cycles of Time.

## **CODED patterns.**

The Systems that follow are Proprietary coded and completely mechanical based on AMT variables.

The workings of the systems are based on the sequence of days and the rotation back towards the central zones using Range Bars. Each sequence already has a statistical tendency and a probability of acting in a certain way as described in chapter 5...

*"Sequential trading is intuitive trading in a nutshell. Intuitive trading is pre-empting the market action, knowing before the outcome whether the odds of this trade will be profitable or not, whilst most price based systems that are systematic in approach are still trading without any probable outcome and in a random way. A trader using sequential data must perceive the correct conclusion; each set-up works if and only when the trader trades the forecastability of that particular set-up."*

Lets begin...

I'm starting at the largest optimum Range of 30 points, it will only trigger on the long side when price is falling and go Short when prices are rising based on the coded variables. (3 period cycles and sequence of days as described in Chapter 5). Once the system triggers, the profit objective is 30 points from entry or low of the bar, and the exit is based on the movement back towards the central dynamics of these variables. The range is clearly defined however the reward is random, as I will describe as we continue with this article.

- The core theory is the rotation back towards the central zones from extremes completing the Range bar in question.
- Entry and exits are clearly defined. These systems do not have any stops!

The systems are different because these systems actually trigger at the extreme of the range and do not wait for the first bar to reverse. As I mentioned at the beginning of this chapter, a 'true-contrarian' system that many don't believe can make money constantly in the market especially when none of the systems have any stops... *"Thinking outside the square, well how about removing stops all together"*

The larger the 'range' the less the system will trigger because the variables rarely line up with the coded variables based on the sequential data. The shorter 'Range' will trigger more often based on the same data and same variables in each system, however I'll start at the top and work it into the smaller ranges, but our goal is to develop shorter systems that are able to trigger more than once per day as per my 'numbers game'.

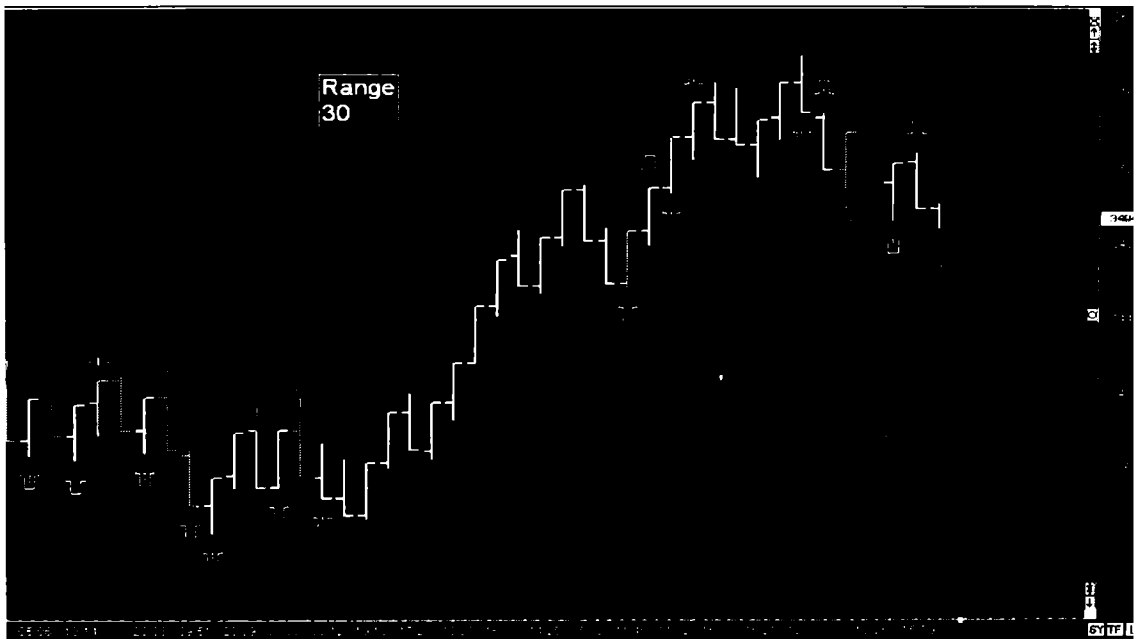
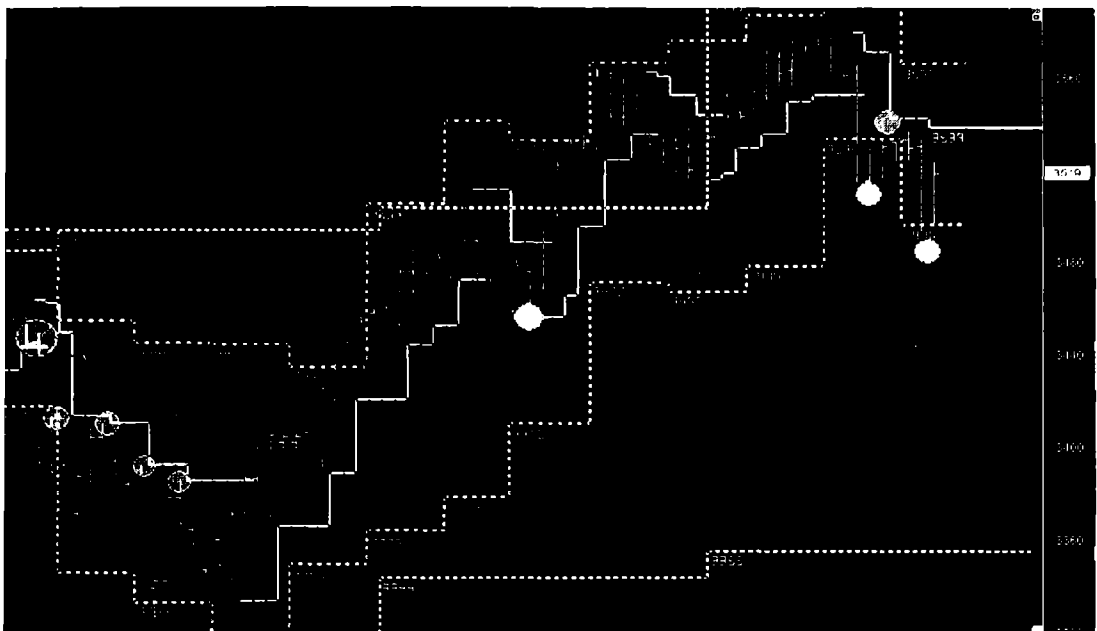


Figure 81. Range 30-coded system.

When we look at all the systems that will follow, they can only trigger a reverse on its lows or sell from its highs with the expectation that price moves in the opposite direction of 30 points. The systems take the contrarian view of the market and goes against the 'herd' that will mostly use some form of breakout or momentum based strategy when trying to trade derivatives.

When we take a look at the following chart (figure 82) along with the daily chart it helps clarify the noise of the market. The Red dots are the sell triggers and the blue dots are the buy triggers as shown in figure 82.





**Figure 82.** SPI daily chart and the Range 30:

Results...

<b>Performance Results for SPIest Range 30 D-W System Frank r11 sho</b>	
<b>From 4/20/2004 18:52 to 7/22/2004 09:50</b>	
Gross Profit	183.00
Gross Loss	0.0000
Net	183.00
Total Trades	7.00
Total Winning Trades	7.00
Total Losing Trades	0.0000
Average Points per Trade	26.14
Percent Profitable	100.00
Largest Winning Trade	31.00
Largest Losing Trade	0.0000
Average Winning Trade	26.14
Average Losing Trade	0.0000
Average Trade	26.14
Max Consecutive Winners	7.00
Max Consecutive Profit	183.00
Max Consecutive Losers	0.0000
Max Consecutive Draw Down	0.0000
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Using this system over the past 3 months has been pretty profitable, however the system still doesn't generate the numbers for short-term trading, because when we look at the 3 months that follow the system has only triggered on 4 occasions and the random reward is a lot lower.

<b>Performance Results for spitest Range 30 D- W System Frank r11</b>	
<b>From 7/6/2004 10:42 to 10/14/2004 03:54</b>	
Gross Profit	<b>86.00</b>
Gross Loss	<b>-19.00</b>
Net	<b>67.00</b>
Profit Factor	<b>4.53</b>
Total Trades	<b>4.00</b>
Total Winning Trades	<b>3.00</b>
Total Losing Trades	<b>1.00</b>
Average Points per Trade	<b>16.75</b>
Percent Profitable	<b>75.00</b>
Largest Winning Trade	<b>32.00</b>
Largest Losing Trade	<b>-19.00</b>
Average Winning Trade	<b>28.67</b>
Average Losing Trade	<b>-19.00</b>
Ratio Average Win/Average Loss	<b>1.51</b>
Average Trade	<b>26.25</b>
Max Consecutive Winners	<b>2.00</b>
Max Consecutive Profit	<b>54.00</b>
Max Consecutive Losers	<b>1.00</b>
Max Consecutive Draw Down	<b>-19.00</b>
Maximum Open Interest	<b>1.00</b>
Maximum Open Interest Average	<b>1.00</b>

So this system generates at the extreme and reverses back into the rotation of the market, and will exit at 30 points, however the reward remains random because we don't know whether price will actually turn exactly at the low or not. If price does swing then our reward is a clear 30 points, but if price keeps falling and swings another 9 points lower, then the reward will only be 21 points. The positive expectancy is there, however reward is random until it closes 30 points in the opposite direction.

If the systems don't have any stops why has the above system returned a loss?

**Note: (SPI contract is \$25AUD per point).**

Because the fall from the trigger has been greater than 30 points, so when it did swing up 30 points it returned a loss of 19 points, basically the market had moved nearly 50 points against your position and personally I don't think many traders are willing to have a system that works under those variables. However, there is a manual override that is used on all systems that I will clearly describe as you continue with this article.

The reason why I have started at such a large range of 30 points will become clearer as we continue but when you closely follow the 30 points ranges there is a statistical phenomena of approximately 75% that the market 'can' rotate back anywhere between 9 and 13 points regularly. I don't recommend blindly trading against the trend after each 30-point move but I do recommend having some sort of short-term confirming signal that gets you into a short term swing trade with a clear target of a double 9 range as your first target. In fact there seems to be a statistical move of two 12-point ranges if there is a 9-point reversal after each 30-point move.

Next system is based on the R21.

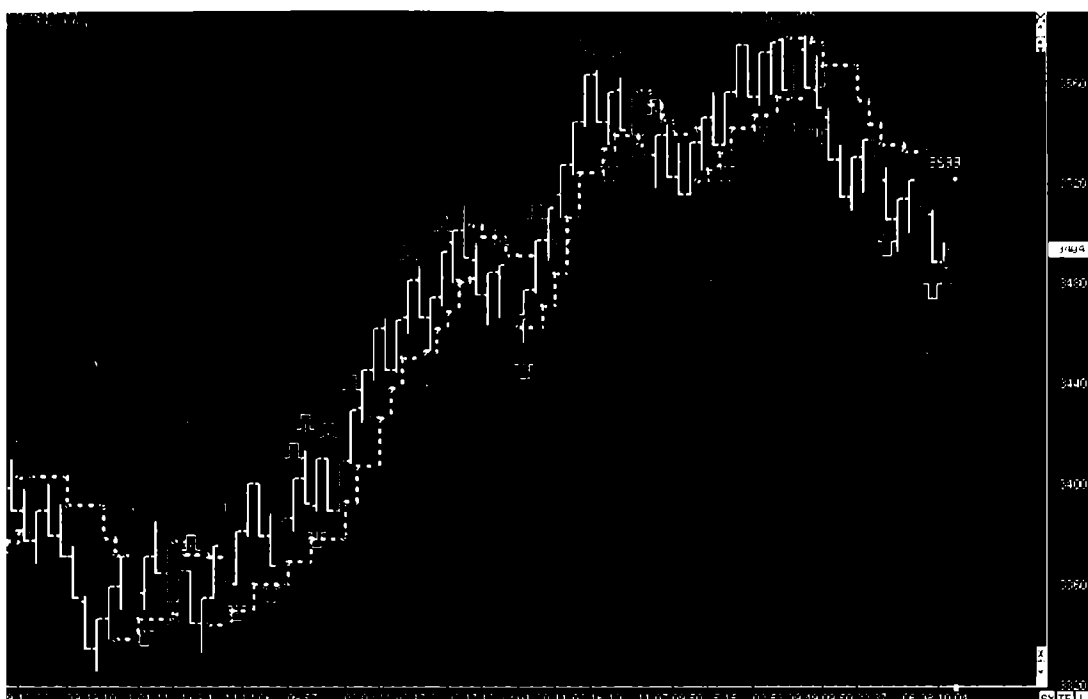


Figure 83. **Range 21:**

As you can already see the smaller the Range it now begins to trigger more often. The systems codes and variables are the same, this time however the model of expectation is a reversal of trend based on 21 points.

Performance Results for spitest Range 21 D-W System Frank r11	
From 4/20/2004 18:52 to 7/22/2004 10:04	
Gross Profit	162.00
Gross Loss	-10.00
Net	152.00
Profit Factor	16.20
Total Trades	11.00
Total Winning Trades	10.00
Total Losing Trades	1.00
Average Points per Trade	13.82
Percent Profitable	90.91
Largest Winning Trade	20.00
Largest Losing Trade	-10.00
Average Winning Trade	16.20
Average Losing Trade	-10.00
Ratio Average Win/Average Loss	1.62
Average Trade	15.64
Max Consecutive Winners	7.00
Max Consecutive Profit	112.00
Max Consecutive Losers	1.00
Max Consecutive Draw Down	-10.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

You need to keep in mind that the systems don't necessary return 21 points for every trade taken. price can continually move with the underling trend before reversing, the further it moves away from entry the less reward, however in both systems there is a 80-90% probability of completing the range above the entry trigger and returning a profitable trade. This goes back to the article 'numbers-game'; positive expectancy with random return of Reward.

The next period of 3 months the same occurrence has occurred and the numbers have dropped based on the variables. Why has this happened? Well the reason is; the systems prefer to trade when there is more of a rotation or volatility within the market structure. Over the past 3 months the market has trended upwards and without pulling back, therefore the systems won't generate or trigger as often because the range of the days has dropped dramatically.

<b>Performance Results for APSP012 Range 21 D- W System Frank r11</b>	
<b>From 7/21/2004 10:02 to 10/14/2004 09:49</b>	
Gross Profit	81.00
Gross Loss	-18.00
Net	63.00
Profit Factor	4.50
Total Trades	5.00
Total Winning Trades	4.00
Total Losing Trades	1.00
Average Points per Trade	12.60
Percent Profitable	80.00
Largest Winning Trade	30.00
Largest Losing Trade	-18.00
Average Winning Trade	20.25
Average Losing Trade	-18.00
Ratio Average Win/Average Loss	1.13
Average Trade	19.80
Max Consecutive Winners	4.00
Max Consecutive Profit	81.00
Max Consecutive Losers	1.00
Max Consecutive Draw Down	-18.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Still, this previous systems are not generating the numbers we want. The next system is the R19 (Range of 19 points). Even though it is only 2 points difference, over Time it makes a world of difference.

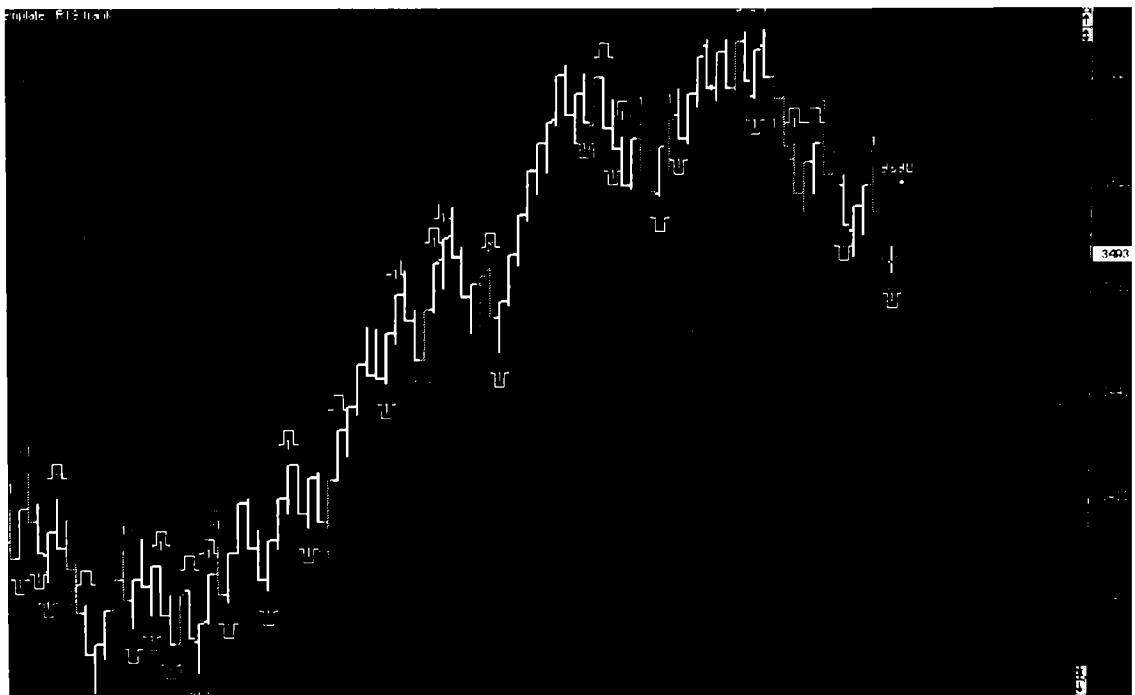


Figure 84.

Range 19.

<b>Performance Results for spitest Range 19 D W System Frank r19</b> from 4/20/2004 18:52 to 7/22/2004 10:00	
Gross Profit	312.00
Gross Loss	-81.00
Net	231.00
Profit Factor	3.85
Total Trades	26.00
Total Winning Trades	21.00
Total Losing Trades	5.00
Average Points per Trade	8.88
Percent Profitable	80.77
Largest Winning Trade	38.00
Largest Losing Trade	-32.00
Average Winning Trade	14.06
Average Losing Trade	-16.20
Ratio Average Win/Average Loss	0.92
Average Trade	15.12
Max Consecutive Winners	11.00
Max Consecutive Profit	162.00
Max Consecutive Losers	2.00
Max Consecutive Draw Down	-32.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Now we start to see the numbers beginning to generate. Keep in mind that these systems don't have any stops and the only way the system can exit is for the market to reverse and complete the bar in the opposite direction and close above the dynamic central point, so if it keeps trending in the opposite direction after breaking a 3x27 low, the further away the larger the loss as shown in figure 85.

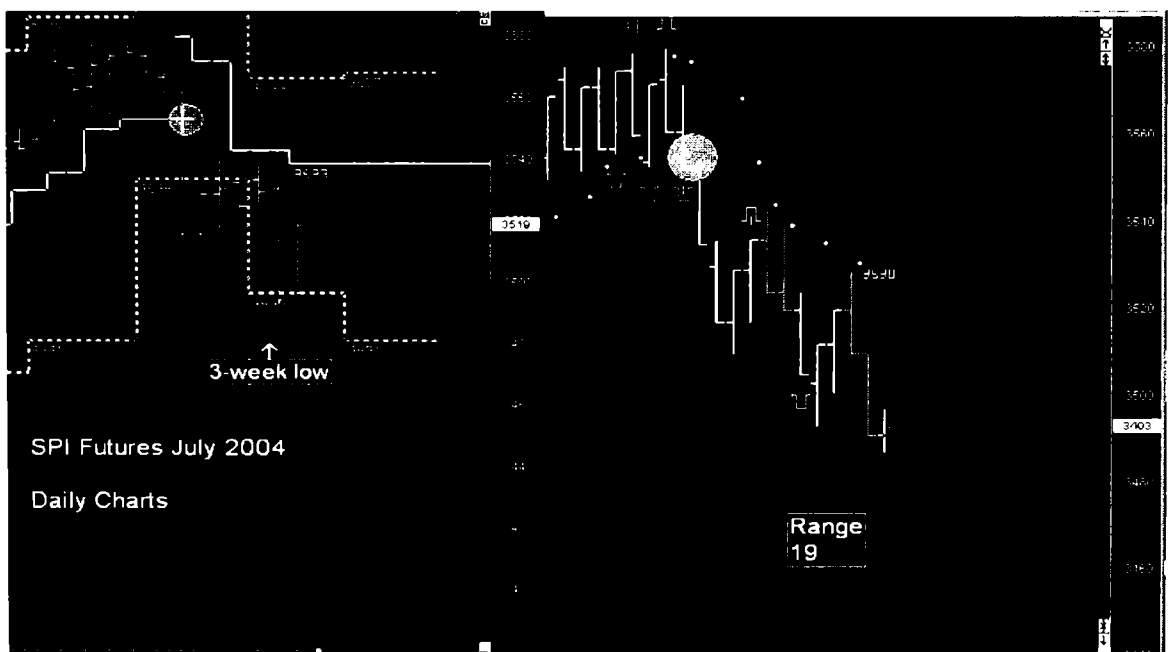


Figure 85. SPI Daily charts and Range 19:

We can see in the above chart the system generating a BUY just above the 3-day lows break, however the 3-day lows break and continues down, it's not until the market reverses upwards does the system exit, at a loss, but immediately swings into a Short and then heads lower. Even without running any mechanical stops the system will still generate the numbers and positive expectancy of profitable returns.

Manually you can apply stops and override the systems whenever these occurrences occur. This goes back to Market RISK as previously described, and this is the manual override I mentioned. If the market Risk and change of trend is clearly defined by any 3-period cycle change then you don't want to be holding positions against any 3-day cycle change.

This applies on all systems, a manual over-ride of applying money management techniques. The change of trend occurs when the 3x27 breaks, if a system is triggered the system will remain open until the opposite bar occurs. So if the break occurs and keeps on moving 100 points in the opposite direction before the first 19 point reversal occurs then system will exit, that is why the 3x27 needs to be a manual stop or a reversal trade capturing the trend. (For any other market use the optimum average 3-period range).

It is the EBB and Flow of trading the movements within the market we want to capture and subject ourselves on a continuous basis until the opposite occurs. Over the next 3 months the system returned 100% however it could only trigger 4 times.

<b>Performance Results for APSPOT2 Range 19 D- W System frank r19</b>	
<b>From 7/27/2004 16:11 to 10/14/2004 09:49</b>	
Gross Profit	71.00
Gross Loss	0.0000
Net	71.00
Total Trades	4.00
Total Winning Trades	4.00
Total Losing Trades	0.0000
Average Points per Trade	17.75
Percent Profitable	100.00
Largest Winning Trade	28.00
Largest Losing Trade	0.0000
Average Winning Trade	17.75
Average Losing Trade	0.0000
Average Trade	17.75
Max Consecutive Winners	4.00
Max Consecutive Profit	71.00
Max Consecutive Losers	0.0000
Max Consecutive Draw Down	0.0000
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Lets continue...

From Range 19 we move down to Range 14.

These range bars are the optimum systems I am using. Other Range lengths don't generate the numbers when combined with the sequential data (Single day Cycles), and I've tested them all using all combinations and varying lengths, hence the drop from 19 points to 14 points. The R27 falls under the 'Observed Phenomena' and doesn't provide any systems under 'CODED' that provide the numbers and positive expectancy that I personally want to operate under. However it falls under the 'Observed' category and later on in this article I'll show how both 'Observed' and 'Coded' need to be used in synch. This section will be called '**Observed vs. Coded**'

<b>Performance Results for spitest Range 14 D- W System Frank R14</b>	
<b>From 4/20/2004 18:52 to 7/22/2004 10:04</b>	
Gross Profit	216.00
Gross Loss	-2.00
Net	214.00
Profit Factor	108.00
Total Trades	23.00
Total Winning Trades	22.00
Total Losing Trades	1.00
Average Points per Trade	9.30
Percent Profitable	95.65
Largest Winning Trade	15.00
Largest Losing Trade	-2.00
Average Winning Trade	9.82
Average Losing Trade	-2.00
Ratio Average Win/Average Loss	4.91
Average Trade	9.48
Max Consecutive Winners	15.00
Max Consecutive Profit	153.00
Max Consecutive Losers	1.00
Max Consecutive Draw Down	-2.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

<b>Performance Results for APSPOT2 Range 14 D- W System Frank R14</b>	
<b>From 7/27/2004 09:51 to 10/14/2004 10:37</b>	
Gross Profit	146.00
Gross Loss	-11.00
Net	135.00
Profit Factor	13.27
Total Trades	13.00
Total Winning Trades	12.00
Total Losing Trades	1.00
Average Points per Trade	10.38
Percent Profitable	92.31
Largest Winning Trade	15.00
Largest Losing Trade	-11.00
Average Winning Trade	12.17
Average Losing Trade	-11.00
Ratio Average Win/Average Loss	1.11
Average Trade	12.08
Max Consecutive Winners	12.00
Max Consecutive Profit	146.00
Max Consecutive Losers	1.00
Max Consecutive Draw Down	-11.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

We can see the difference now between the systems generating the numbers, when you have a close look between each different rotation. Even though the sequential data is exactly the same in each system, the BAR movement is completely different, as we can see in the next chart of both the R19 along side the R14, depending on the past price action, if the bars aren't in union you are going to get a conflicting data, however it allows trader's to go from Shorts and into Longs and visa-versa without second guessing the market.

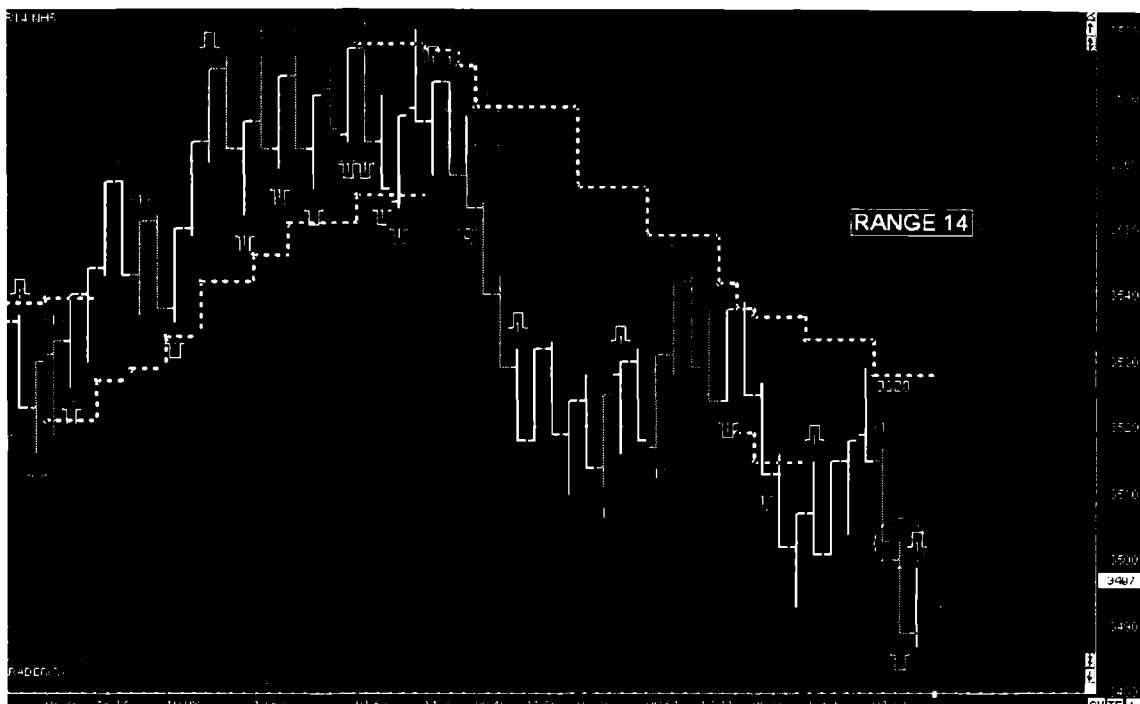


Figure 86.

Range 14.

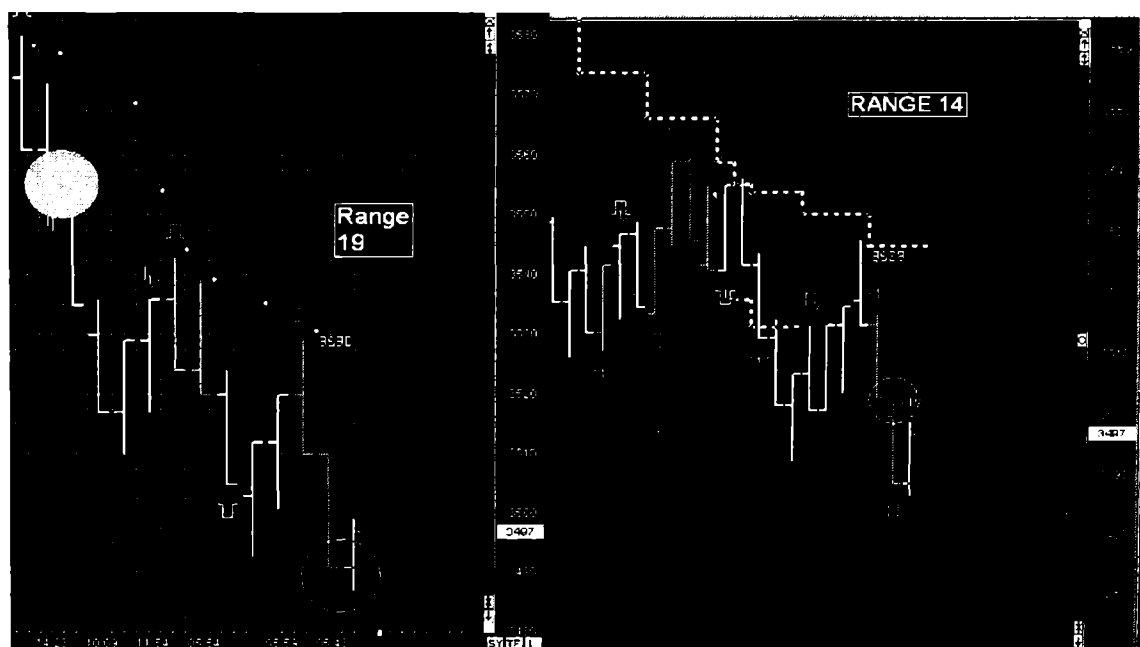


Figure 87.

If you look at the Range 19, you will notice it goes short at 3520 and then it completes the downside and exits at 3490. If you notice in the same chart as it triggered at 3520, the R21 didn't trigger the short until 3522, when you go back to the Range 30 system, the System was LONG earlier and wouldn't complete until it reached 3523.





One thing we notice over the past 3 months from August until October 2004 (Figure 88), the systems having been running close to 100%, and when we look at daily charts we can see the reason why. The market has been trending in one direction. There has not been a change of cycle (3x27) since August. Every time price moves lower the systems trigger and simply captures the underlining cycle trend. There can't be anything simpler than trading with the 'trend' using clear market 3 period cycles and dynamics as has been described throughout the book.

From Range 14 we move down to Range 11.

When I decided to write this chapter I saved the results from March 2004 for the following systems, so we can now begin to see how from 1 month to the next the systems can vary.

The R11 system based on the Range 11 provided within this 3-month (March-June 2004) triggered a total of 74 times and a potential of 471 points

<b>Performance Results for APSP0T24 Range 11 D- W System Frank 99</b>	
<b>From 3/9/2004 16:10 to 6/15/2004 11:49</b>	
<b>Gross Profit</b>	<b>632.00</b>
<b>Gross Loss</b>	<b>-161.00</b>
<b>Net</b>	<b>471.00</b>
<b>Profit Factor</b>	<b>3.93</b>
<b>Total Trades</b>	<b>74.00</b>
<b>Total Winning Trades</b>	<b>61.00</b>
<b>Total Losing Trades</b>	<b>13.00</b>
<b>Average Points per Trade</b>	<b>6.36</b>
<b>Percent Profitable</b>	<b>82.43</b>
<b>Largest Winning Trade</b>	<b>22.00</b>
<b>Largest Losing Trade</b>	<b>-22.00</b>
<b>Average Winning Trade</b>	<b>10.36</b>
<b>Average Losing Trade</b>	<b>-12.38</b>
<b>Ratio Average Win/Average Loss</b>	<b>0.84</b>
<b>Average Trade</b>	<b>10.72</b>
<b>Max Consecutive Winners</b>	<b>25.00</b>
<b>Max Consecutive Profit</b>	<b>288.00</b>
<b>Max Consecutive Losers</b>	<b>2.00</b>
<b>Max Consecutive Draw Down</b>	<b>-31.00</b>
<b>Maximum Open Interest</b>	<b>1.00</b>
<b>Maximum Open Interest Average</b>	<b>1.00</b>

Let's now have a look at the 3- month period from June to October 2004; the trades decrease considerably, even though the percentages remain very similar. What made such a difference? The period from March-May seemed to trigger more often than the period from June, and the reward has also drop considerably. Also the shorter the system we can see the losses have increased. That means price is actually falling further than 11 points after triggering, so any swing upwards hasn't been able to close above the trigger. This goes back to the higher Range systems and what is happening with the others. It also helps being able to trade the larger systems, so if an R14 triggers lower and you are already holding an R11, then exiting at the r14 would be a wise choice thus increasing the reward of the lower R11 system

<b>Performance Results for spitest Range 11 D- W System Frank 99</b>	
<b>From 7/19/2004 20.35 to 10/16/2004 02.50</b>	
Gross Profit	214.00
Gross Loss	-67.00
Net	147.00
Profit Factor	3.19
Total Trades	26.00
Total Winning Trades	22.00
Total Losing Trades	4.00
Average Points per Trade	5.65
Percent Profitable	84.62
Largest Winning Trade	22.00
Largest Losing Trade	-33.00
Average Winning Trade	9.73
Average Losing Trade	-16.75
Ratio Average Win/Average Loss	0.58
Average Trade	10.81
Max Consecutive Winners	9.00
Max Consecutive Profit	106.00
Max Consecutive Losers	1.00
Max Consecutive Draw Down	-33.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Look at Figure 89 chart and compare the price action between timeframes in question.

Around March-May 2004 the market went into a tight consolidating pattern where the rotation towards the central zones flourished, and this is where the systems will always generate more often.

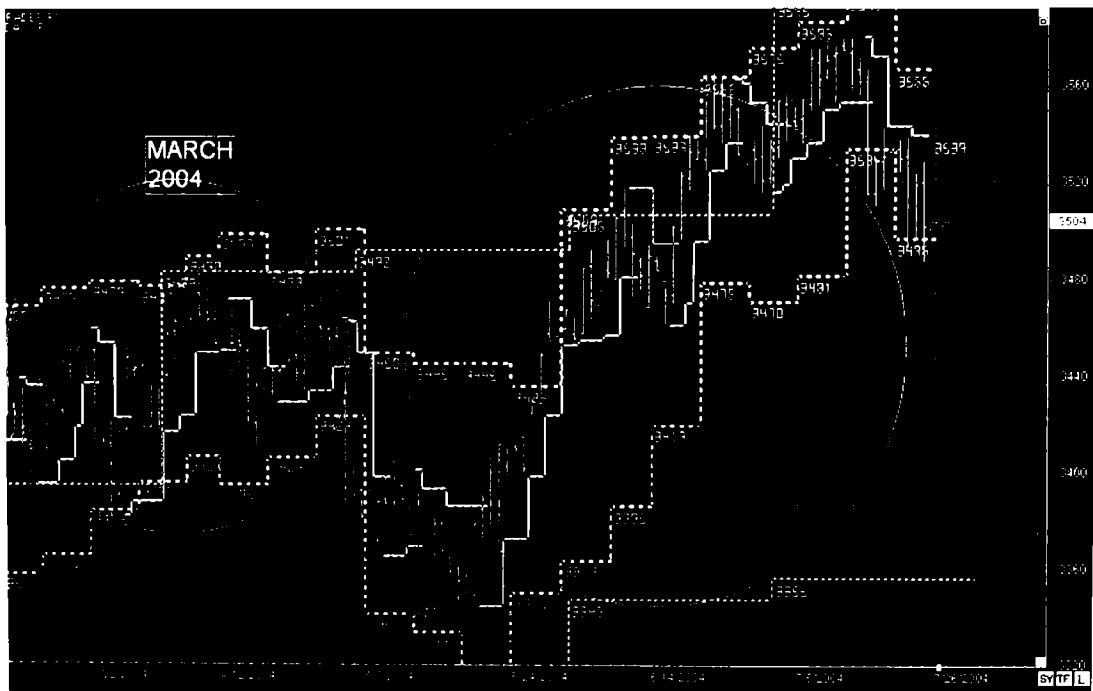


Figure 89

The period following went into a trending period, therefore the systems could not generate the signals as often because price didn't reverse as often. Also keep in mind that these systems are not generating any stops, the greater the breakout from any 3-day cycle and greater trending period the greater the loss will occur based on the coded systems. However, the systems are still generating the numbers and percentage returns that confirm the same statistical patterns are always occurring providing a very rewarding expectancy. I need to remind you that the systems have no stops but that does not mean that I as a trader shouldn't be able to use 'Observed' areas as manual overrides as my personal money management technique like a Range 9 reversal bar as previously described.

And when you start to move into the shorter 'Ranges', the same applies. These systems flourish when the market is consolidating over a period of TIME. This is when the breakout systems fail miserably and when most damage occurs to trader's accounts. When it comes to trading derivatives, the market more often than not spends most of its time consolidating and rotating than actually trending. This is why most breakout systems fail in generating the numbers to trade on shorter timeframes that suit traders wanting day trading strategies.

*"The argument though, is that, the market is non-linear, it provides the perfect environment for rotation to flourish. A discretionary trader trading the smaller daily cycles or an intra-day timeframe essentially trades against all trends, short, medium or long. The reason she trades against all trends is that, she expects prices to rotate back to some central point. If the market spends more time rotating within itself and making extended moves as time moves forward then combining the two concepts would provide a very robust methodology. The combination of the two has the potential to form a predictive model with a high probability of success." (AMT book 2003)*

The dynamics of the market is random (until confirmed at the close of the timeframe) yet it continually provides the statistical movements of 'ebb' and 'flow' that trader's want. We need to continually subject ourselves once all the variables are aligned. Once a 3-day cycle, or better still the 3XR27 range breaks, the over-riding money management techniques are employed. Or for most other traders they apply their breakout systems as they try and capture the 'new' trend that potentially could develop with clear models of expectation based on the larger timeframe dynamics. This will normally have a 1 bar range of 27 points minimum move.

### **Let's continue...**

Throughout the book I say, "tight money management techniques" and "let profits run". Yet within this article I say the opposite, and to many it might sound contradictory, "no stops and profit objectives" However I have assessed my axiom of the previous by determining my stops based on Market Risk whilst letting my profits run toward statistical objectives based on the positive expectancy of my coded systems and exits based on Range of price. If my system has an expectancy of 14 points, why exit at 9 points. When I make a statement in any forum of a 'potential move' towards a pre-determined target, many believe this is a form of prediction and completely dismiss it, however every post over the years has always been backed by statistical patterns.

As one Australian based trader who trades the Euro market once said to me in private, *"I've never seen anyone call the market as accurate as you"*. Well Steve, now you know why. I'm not trying to impress you; I'm only trying to impress upon you the importance of market dynamics and the movement of price. It becomes important to know your exit! Many traders will disagree with that statement but I truly believe that your exit from any trade is just as important as every other step you take when making trading decisions.

### **Range 9...**

The Range 9 system is one of my favourites because any reversal normally moves in a double bar move in the opposite direction. It serves it's purpose best when the market reverses late in the day and more often than not completes the move into the close of the day. This has already been explained in previously, and again we see this occurring from the trend squeeze from the lows or highs in the day normally from 2.50pm and then into the close of the day at 16.30pm.

Note: A double R9 doesn't not necessary mean an 18 point move. Potentially an 18-point move can eventuate however that will depend on the low of the 2<sup>nd</sup> bar if reversing from lows and visa versa from highs.

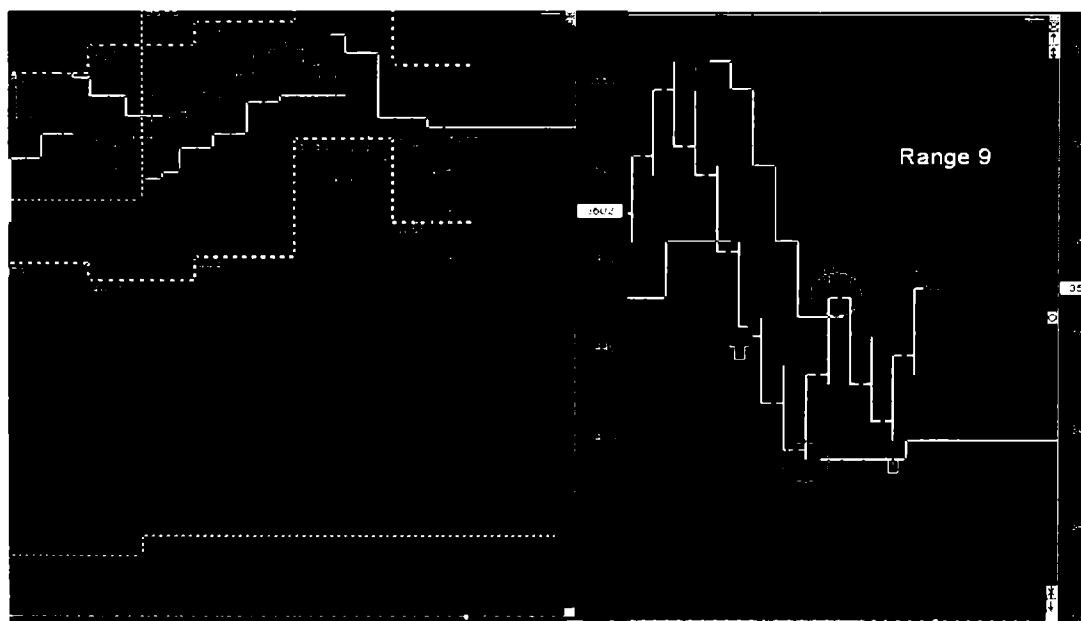


Figure 90.

Following system is from December 2003 until March 2004, then from March until June, and now from July until October 2004.

From 12/31/2003 10:46 to 3/12/2004 10:48

Gross Profit	657.00
Gross Loss	-315.00
Net	342.00
Profit Factor	2.09
Total Trades	120.00
Total Winning Trades	90.00
Total Losing Trades	30.00
Average Points per Trade	2.85
Percent Profitable	75.00
Largest Winning Trade	19.00
Largest Losing Trade	-37.00
Average Winning Trade	7.30
Average Losing Trade	-10.50
Ratio Average Win/Average Loss	0.70
Average Trade	8.10
Max Consecutive Winners	13.00
Max Consecutive Profit	96.00
Max Consecutive Losers	3.00
Max Consecutive Draw Down	-45.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Performance Results for APSPOT24 Range 9 D- W System Frank 99  
From 3/9/2004 16:10 to 6/15/2004 11:46

Gross Profit	629.00
Gross Loss	-185.50
Net	443.50
Profit Factor	3.39
Total Trades	84.00
Total Winning Trades	71.00
Total Losing Trades	13.00
Average Points per Trade	5.28
Percent Profitable	84.52
Largest Winning Trade	19.00
Largest Losing Trade	-22.50
Average Winning Trade	8.86
Average Losing Trade	-14.27
Ratio Average Win/Average Loss	0.62
Average Trade	9.70
Max Consecutive Winners	37.00
Max Consecutive Profit	307.00
Max Consecutive Losers	3.00
Max Consecutive Draw Down	-33.50
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Performance Results for spitest Range 9 D- W System Frank 99  
From 7/19/2004 20:35 to 10/15/2004 05:14

Gross Profit	289.00
Gross Loss	-49.00
Net	240.00
Profit Factor	5.90
Total Trades	41.00
Total Winning Trades	36.00
Total Losing Trades	5.00
Average Points per Trade	5.85
Percent Profitable	87.80
Largest Winning Trade	17.00
Largest Losing Trade	-17.00
Average Winning Trade	8.03
Average Losing Trade	-9.80
Ratio Average Win/Average Loss	0.82
Average Trade	8.24
Max Consecutive Winners	21.00
Max Consecutive Profit	170.00
Max Consecutive Losers	2.00
Max Consecutive Draw Down	-22.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

As you can see over this period, the lower the range the more often the systems will generate, and the dynamics of the market continues to provide the numbers and positive expectancy (reward random) we as short-term traders 'Want' and 'Need' to operate under, even continuing lower into Range 8 and Range 7. However going into the lower ranges I don't think is warranted or increases the proficiency because slippage and brokerage eats into anything lower than 7.

The core theory of rotation and AMT dynamics continually provide the high percentage of positive expectancy based on coded elements of price making the statistical moves using sequential data and Market cycles.

<b>Performance Results for spitest Range 8 D- W System Frank 99</b>	
<b>From 7/19/2004 20:35 to 10/15/2004 09:53</b>	
Gross Profit	290.00
Gross Loss	-62.00
Net	228.00
Profit Factor	4.68
Total Trades	44.00
Total Winning Trades	36.00
Total Losing Trades	8.00
Average Points per Trade	5.18
Percent Profitable	81.82
Largest Winning Trade	16.00
Largest Losing Trade	-17.00
Average Winning Trade	8.06
Average Losing Trade	-7.75
Ratio Average Win/Average Loss	1.04
Average Trade	8.00
Max Consecutive Winners	10.00
Max Consecutive Profit	76.00
Max Consecutive Losers	2.00
Max Consecutive Draw Down	-24.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Between March and June for those 3- months whilst the market was consolidating using the many systems over the numerous length of ranges and only trading 1 contract for each, the potential reward was tens of thousands of dollars between March and May, lesser for the following months because of the trending period of the market, and that is without any stops or employing the money management techniques as previously described.

I say potential return because these systems are all based on the 24-hour market, so unless you can stay awake 24/7 then manually trading all the systems is near an impossibility. Slippage does play a role, because any reversal point could be exact, so if you are trying to exit at a certain price and you are in the market depth, price might only trade 2 contracts at the price in question before reversing, thus missing out at an exit. These systems are precise in nature however they still operate under the random return of reward as I previously mentioned.

## Traders Objectives.

Over the course of any trading period we use varying length of 'ranges' because we want to be able to trade the dynamics of the market and trying to capture most of the moves, or the ebb and flow of price within the market structure.

Keep in mind these systems are independent of everything that is within the book based on the 'Observed Phenomena'; it doesn't concern itself with the 3-period timeframe dynamics. These systems are purely based on the theory of trading non-linear markets and trading against the trends with an expectation of price moving back towards dynamic central zones using sequential data based on the sequence of the past 5 days.

Of course we can discretionarily apply these systems when it conforms with price action that we are more accustomed with or even comfortable with, however we can see over the course of 3 months and trading every trigger within each system we can see how profitable the past 3-months have been and what percentage return these have returned. Each system is returning way over 80% and many are much more.

You can do your own sums over the period I have shown you if you wanted to trade all the triggers available, and keep in mind that during the past 3-months the market has been trending where the systems have generated less. Between March and May the market conditions provided a perfect environment for these systems to flourish.

What I have outlined throughout this chapter is something most traders are not familiar with and goes against what most traders believe guarantees success when trading. Most believe trading with the trend combined with some form of confirming price indication (system) using momentum strategies and using tight money management techniques should provide a profitable return when trading short-term derivatives. Most traders try and develop 'short term' mechanical systems and then stick to trading only 1 system, applying tight stops and hopefully letting profits run. Nothing wrong with that except, what happens if you are stopped out? Traders should not dismiss developing multiple systems even if trading 1 market.

It is correct in developing a system which has a positive expectancy, however the shorter the timeframe the less rewarding for most breakout strategies because of this 'rotation' phenomena, and sadly this is where most 'breakout systems' fail.

However AMT has done the opposite, removed tight stops, in fact all stops, and every trade is going against the underlining 'short-term' trend. Using AMT methodology and proprietary indicators we have turned the theory upside down and have shown how profitable it can be as long as you subject yourself on an outgoing basis.

## **OBSERVED VS. CODED phenomena**

I want to go back to the Observed phenomena of our markets and how the dynamics of the market easily provide 'models of expectancy' because of the repeated patterns of price action.

There is a very big difference between Observed and Coded because the first has no expectancy whatsoever. Coded provides us with the potential to make money, but Observed can't say this even though it becomes an important part of assessing Market RISK.

For Example let's look at the market dynamics of the market based on the 3 period timeframes. Math, Time and Price define these timeframes and the Market structure. Firstly, let's look at a simple daily Bar chart of the Australian Futures market.



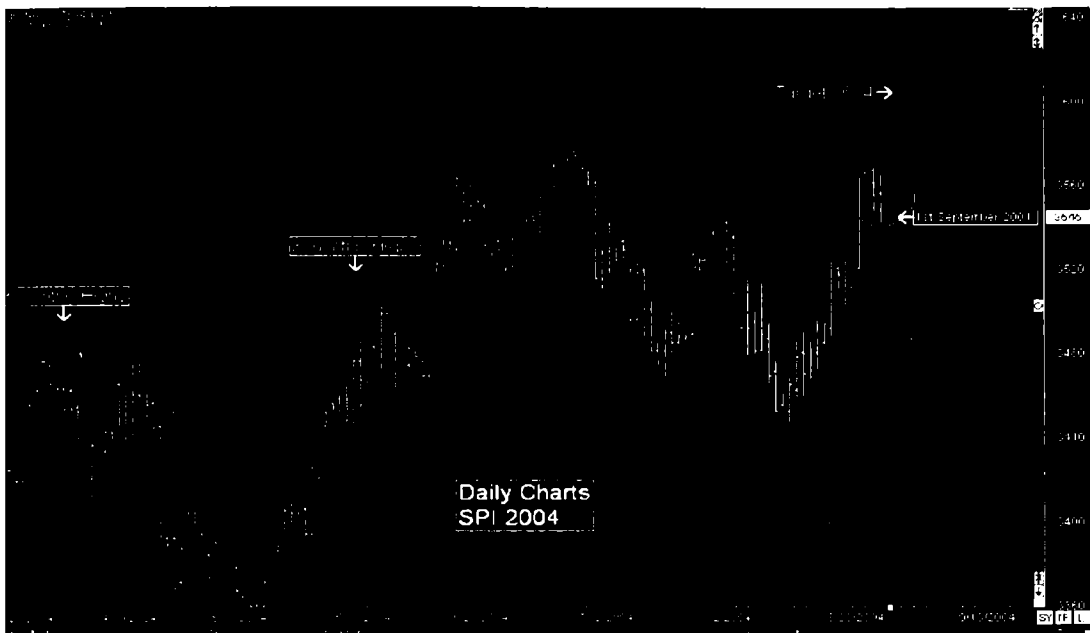


Figure 91.

Subject re: SPI  
 Posted 01/09/04 10:45 - 117 reads  
 Posted by Frank Dilernia  
 Post #2124 - in reply to msg. [2123](#) -

New month new highs.

New month highs for Sept 3604.

I put this out on September 1<sup>st</sup> and made a 'model of expectation' that price would move from 3545 up to 3604 and make new highs. Price action doesn't show anything on this chart that suggests the market will go that high, however using AMT dynamics and an 'Observed Phenomena' this is the area most likely our market would go to based on the two higher timeframes, weekly and monthly. Over the course of the next few days, and we can see in figure 92 in the left chart we introduce the 3-week and 3-month dynamics, and on the right Chart shows what happens after these zones are reached.

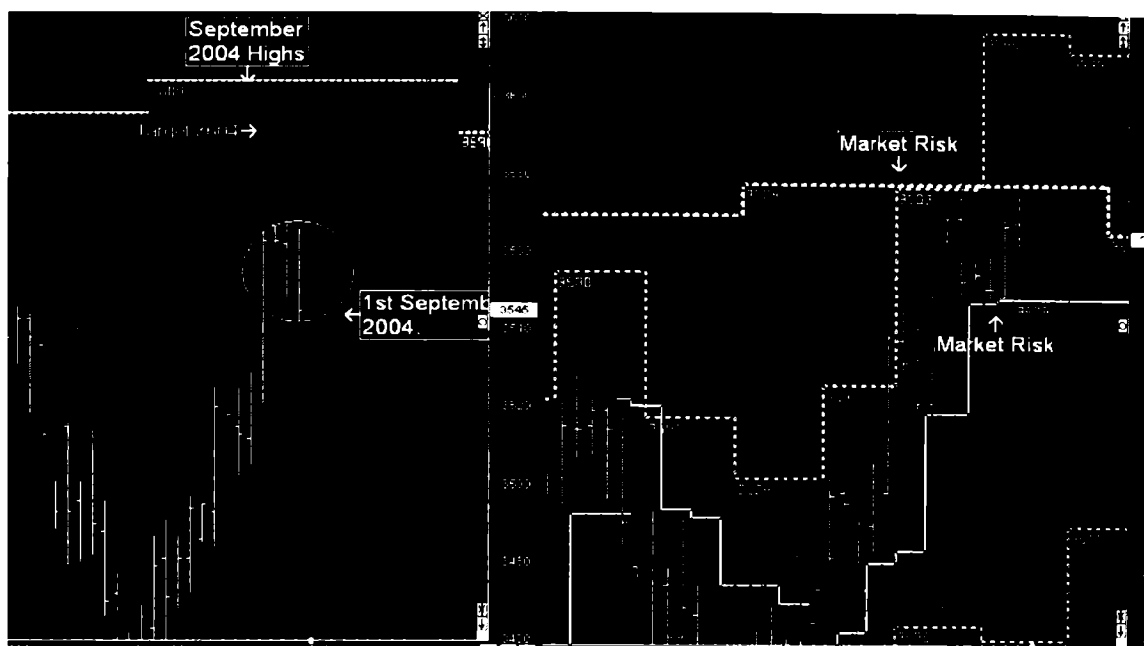


Figure 92.

Once price has reached 3604 based on the 3week (green) and 3 month (yellow) the market stalled and reversed. We have identified MARKET RISK, zones in the market where price can likely go and likely stall/reverse. These are 'Observed Phenomena' of the market Structure.

Subject re: SPI  
 Posted 02/09/04 08:49 - 393 reads  
 Posted by Frank Dilernia  
 Post #2135 - in reply to msg. [2134](#) -

In any normal 3 monthly cycles you would look for the new dynamic highs as a resistance zone, statistically these highs would be a 'sell' zone i.e. 3604.

However, the month of expiry of contract is when most of these zones fail or less of a chance of the market selling off.

Being Sept this is something you need to keep in the back of your mind and with any break we follow the new weekly dynamic levels currently 3638 but these will of course move dynamically higher depending on the close of each week.

3-day lows are the guide and only confirming reversal point.

In this post pre market on the 2<sup>nd</sup> of September before 3604 I have identified that with the expiry of the contract in September there is more of a chance that these 3-monthly highs have more of a chance of failing and will follow the path of the 3 week cycles. Already in the above chart we can see the new 3-week highs pointing towards 3645 once a confirmed break of 3604 occurs. Above 3064 there is no other resistance until the 3-week highs are reached which is the exact same price as the 3-yearly dynamic levels.

And we can see over time how price moved towards those 3-week highs. This again is the 'OBSERVED' whilst as the market is moving towards the re-occurring pattern of the Market Path, the CODED systems are providing the triggers to trade the movement based on Positive expectancy as I have described throughout this article.

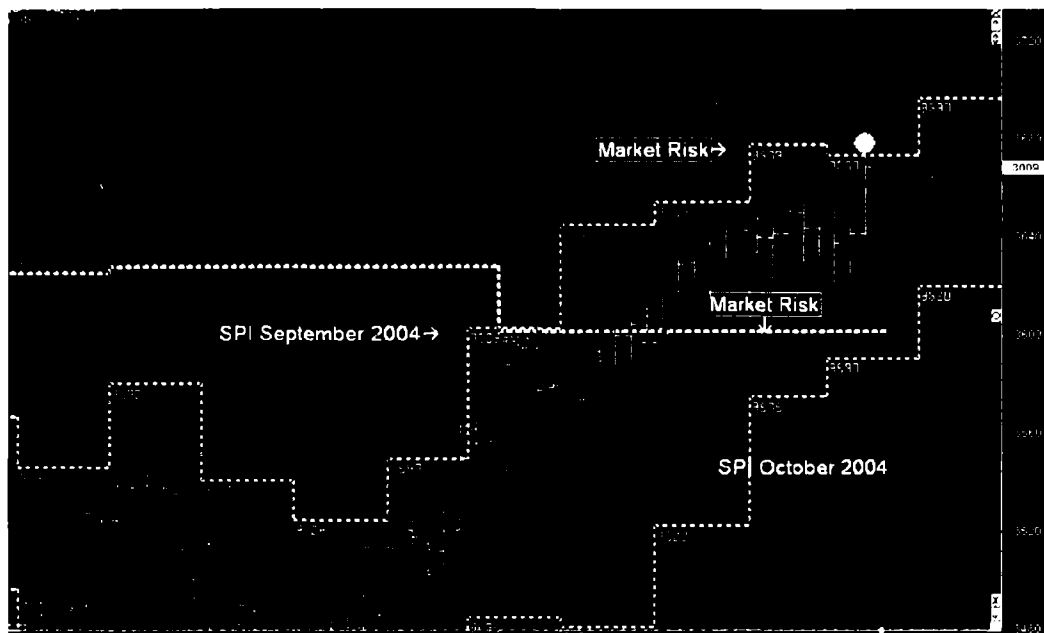


Figure 93.

Let's fast forward to October 2004 and see if the same re-occurring patterns unfold.

Subject re: SPI trading - 30/09/04  
 Posted 02/10/04 01:17 - 172 reads  
 Posted by Frank Dilernia  
 Post #2270 - in reply to msg. 2269

Keep in mind that the market likes to gravitate towards the new quarterly highs in the early part of the timeframe.

The 3-month dynamics is slightly different with this figure at 3724.

Same day 1 month in advance I post the exact same scenario of the market moving towards the new October highs of 3724. This is no resistance on the market at this stage because we are trading above all the higher timeframes. Time can only form support or resistance, currently we are trading above 3645 or the Primary trend has broken out.

The only thing about this rally at this point now is that our market has a tendency to move towards highs in October before tripping over back towards the dynamic 50% levels and then around mid November begin its Christmas rally.

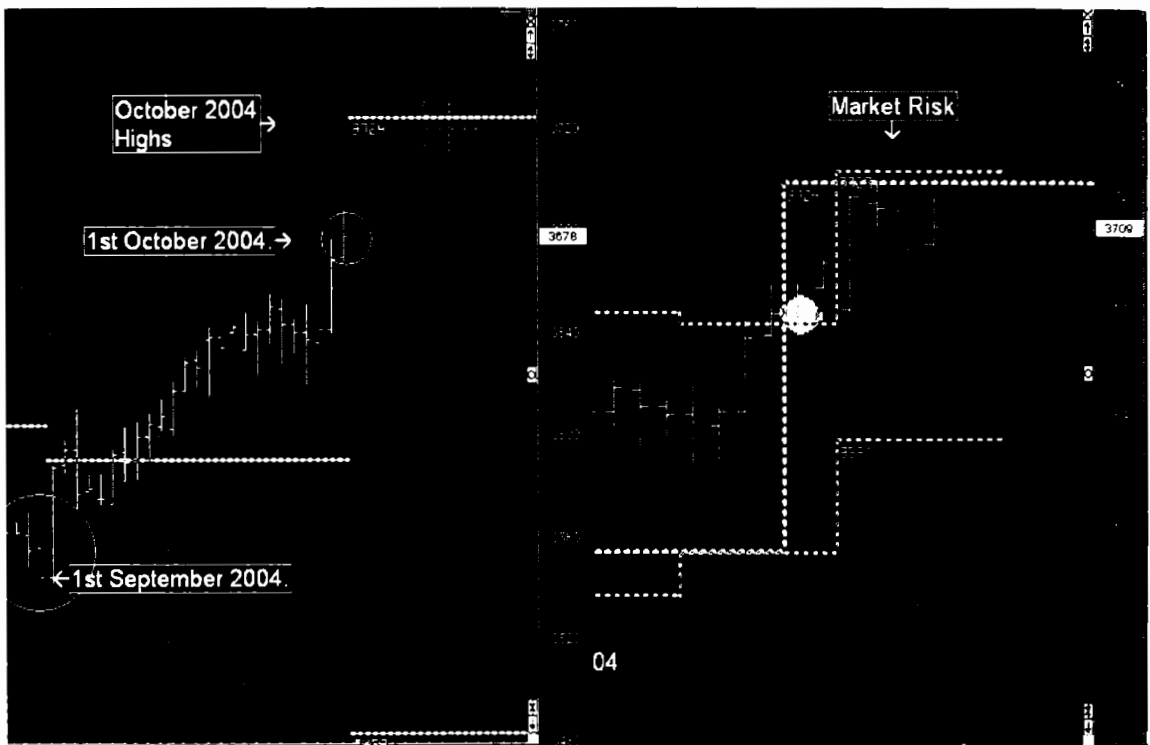


Figure 94.

As we can see the market has again moved towards the 3-month highs and 3-week highs before stalling, now compare the two periods between September highs and October Highs based on the 3-week Highs.

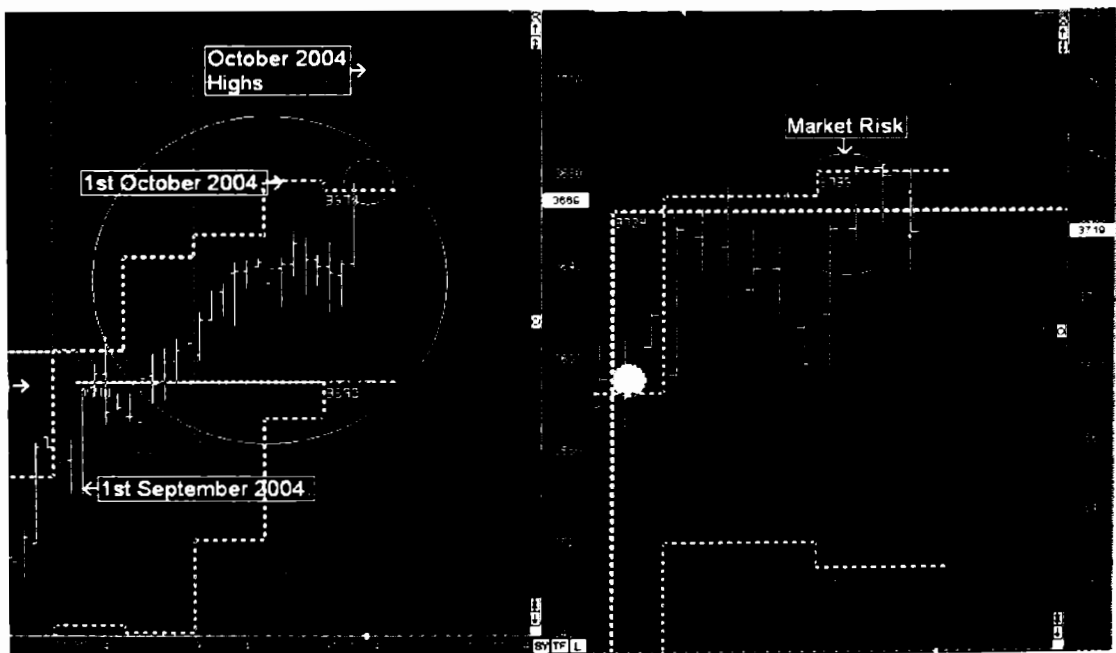


Figure 95.

You'll notice when the 3-months highs break in September there is no resistance until the 3-week highs. In October the dynamics are completely different, yes the 3-month dynamics break at 3724, however the 3-week highs are 3736, again defining the MARKET RISK and the 'OBSERVED' model of stall and rotation.

Break it down even further and look at the price action as a DAY TRADER. Using both the OBSERVED and CODED together, one is based on a discretionary model without any positive expectancy whilst the latter has everything a trader wants.

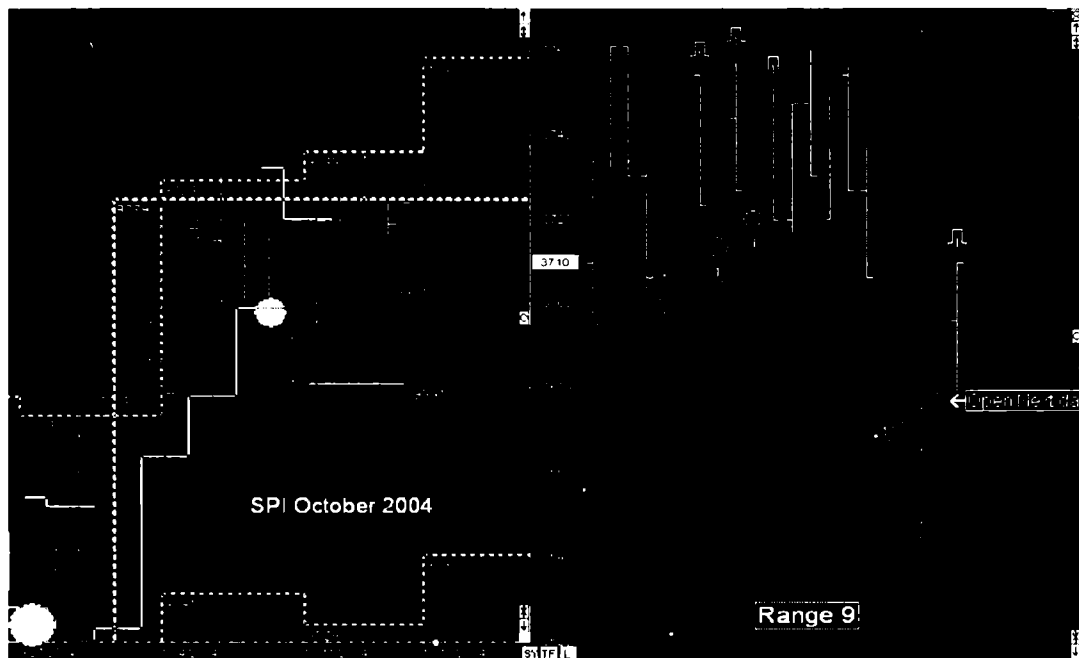


Figure 96.

In figure 96 we can see how 3724 has provided support (3-month highs) when it broke out, in Figure 97 we can see the SDC is an F set-up and the Range 9 CODED system on this day triggered on 3 different occasions every time price failed at the 3-week highs of 3736. (System 8-3 times; System 11/once). The big difference between using time based intra-day charts and any Range bar chart is the smoothness of the latter. When you compare them both, the Range bar simply removes the noise.

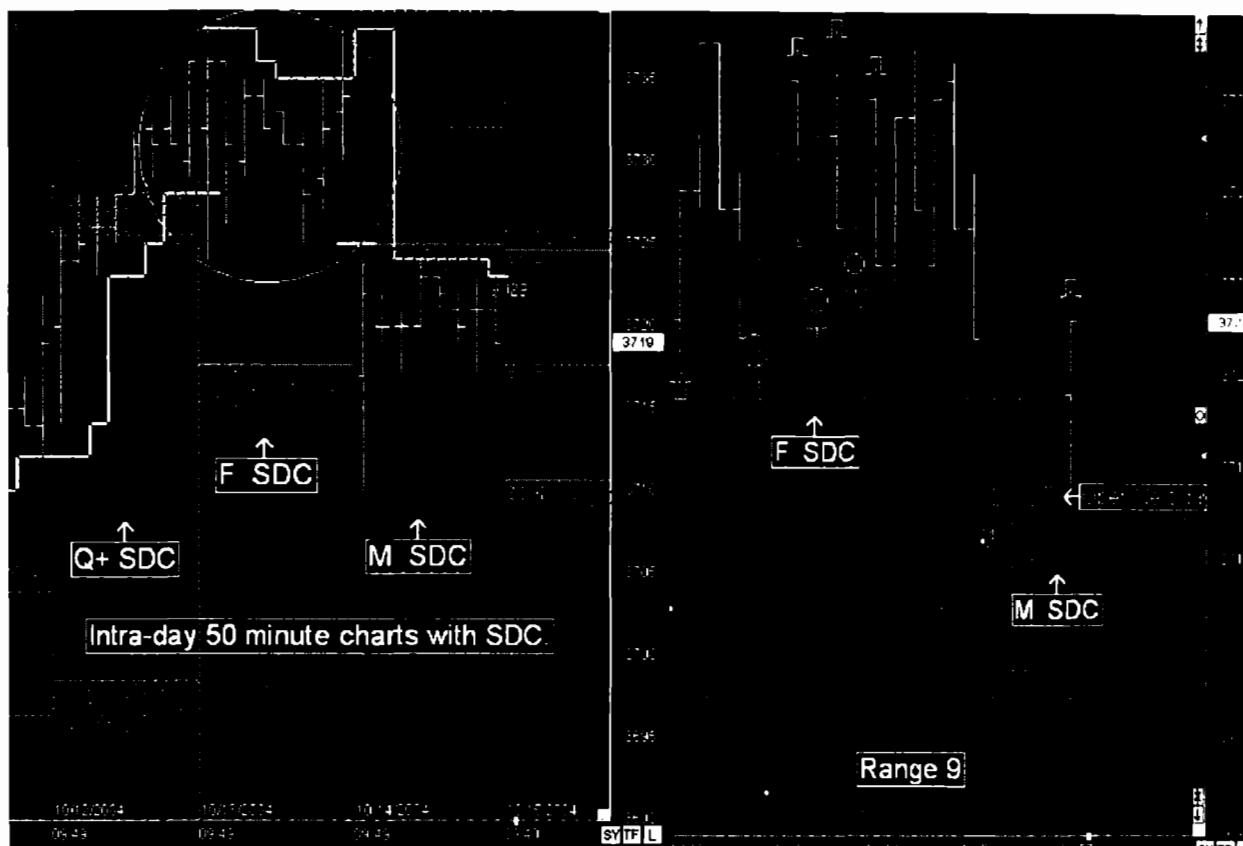


Figure 97.

*"The tighter the trading day the system flourishes, as shown above, if the day is a trending day then each system can only trigger once, however if there is no upper resistance based any 3-period Dynamic Timeframe then as a trader I can make the discretionary decision to allow some contracts to stay open and have a 'model of expectation' that the day session could trend based on the R27 range. We never know until after the fact if there is no upper resistance based on market dynamics using 3-day, 3-week, or 3-month timeframes."*

The next day the market opened lower and gapped down, (low 3704/30+ points from highs) as shown in the Day session (figure 97). However the Range Bar as explained in Chapter 7 fills in the gaps, so we open at 3717 but the system has triggered a BUY 3722 (range 9) with a positive expectancy of the market rising 87% over the past 3 months. (Over 80% for 2004 and Range 11 & 14 triggered lower) And we can see the market had a UP day but 3724 and the 3-month highs provided resistance once again.

The CODED systems are independent of the market dynamics (RISK), but nevertheless the AMT dynamics still provide an Observed model for Traders to use as 'models of expectation'. I call it 'Models of Expectation' because it's the combination of using the market structure and statistical movements of price rotating towards an exact Range of Price within the day session. The movements are precise!

## One System vs. Multiple Systems

Let's look at the R9 system and decided this was the only one you wanted to trade. Over the course of 2004 based on the system results you would have a positive expectancy over 80% every time you traded, in approximately 200 trading days it has triggered 245 times with a potential reward over the course of the year of 1025 points (\$25 per point per contract). Basically, everyday you came into the market you had more than 80% chance of having a winning day even without stops, 'if' you were able to take every trigger and captured every 9-point swing based on the system variables and the above results. Keep in mind that you could be holding the trade until the R27 completes increasing the reward above what those systems have shown.

However, this is the real world and not a world based on systems. What I mean by this is, are you actually able to get every 9-point swing that comes about?

What happens if the R9 system triggers a BUY for example as price falls at 3675, I as a trader have to make the decision of... do I jump in on the bid and wait for my price to hit? Or do I make the decision and pay the exit tick? Because I actually don't know whether it will only take a few contracts before swinging, as is the case on many occasions. The exit is exactly the same, do I wait in line at the 9-point swing or do I lose the extra tick, so in fact there is a slippage of 2 ticks per system.

I prefer to trade the latter and give up the 2 ticks to make sure I get in and out of the trade as per system. I would be very surprise to hear or read that most systems don't have some slippage involved, especially in the real world of trading. Sure I as a trader might want to wait for the exact variables because the moves are exact and precise, but nevertheless I want to make sure that I'm in the trade and out of the trade than hoping I'll get in and out the trade based on the system variables.

Back to the R9 system and each trigger, how close is the signal to the sequential central points for the system to exit? Remember the system normally can only exit when it crosses the dynamic central points for each SDC. The closer, then the movement will only be a 9 point swing, however the further away the system remains open. That is why you'll get a double R9 bar from 2.50pm swings because price is actually further away from those sequential points. So in fact, the 9-point swing could actually been a maximum 18-point swing as previously described.

What happens when we introduce the R11 and another system? The R9 triggers at 3675 and I pay the extra tick at 3676, so my maximum return can only be 7 points if price is close to the central points. But on this occasion price falls through 3675 and hits 3673, now the R11 triggers a BUY (1 tick slippage), so instead of now having a maximum of a 5-point swing based if I was only trading an R9, the R11 has a potential of moving 11 points, so the maximum (based on slippage) is 9 points and instead of having an 5 point swing on the R9, it actually remains at 7 points because I'm holding the contracts based on the 11 point swing.

That is why having multiple systems if you're only trading 1 market a must! You are only hindering the potential of rewards if you only develop one system if you subscribe to the theory of entry and exits as being important as each other.

## **In Conclusion.**

Derivative markets should have a more probable and predictable outcome than before. If the unknown outcome of human action has been replaced by the probability of precise movements occurring within the market regularly, then we as traders should be able to maximize the trading potential that exists. **There are two reasons for this. 1. Our profit objectives will become a lot clearer through the distribution of price with each and every extended movement in price over time and, 2. Any negative mindset that exists should be replaced by the statistical probability of future outcome.** If the market performs the same sequence of repetitive patterns based on past data, then the trader should become more systematic in their approach and maximize the unlimited trading potential that exists within the numerous timeframes.

There are two stages to any system traded; **the trade entry and the exit using optimum range for profits based on positive expectancy.** To minimize the loss and maximize the profit, the entry is what we must focus on because we already have a firm belief of how the market behaves. **If our beliefs are correct, then the trade entry cannot be subjective, we either trade as close to our set-ups when the market is aligned in a way that conforms to our rigid variables of the trigger, or if not, then we don't trade.**

**Whether the trade works or not, we simply move onto the next. Understanding that the market moves in waves of TIME instead of waves of Price will determine all our Risk- Reward probabilities that are already operating under positive expectancy.**

This Chapter is to help any trader think outside the square, understand the dynamics of the market based on TIME and help develop systems that are not based on momentum. This is where I believe traders' fail because they continually look for breakout strategies, these strategies work best for traders willing to hold positions for more than 1 days trading. If you want to trade intra-day, then too maximise the potential of any trading day the opposite needs to be done.

**Note:** These CODED systems and proprietary calculations are not disclosed in the book, however these systems are now able to rent for a number of Global Derivative Markets. Please contact me via email for more information.

**Next chapter continues with the same theme as this chapter, however I expand the AMT systems even further.**



## CHAPTER 9

### Market Dynamics; Part 3.

*"There are two types of traders, discretionary and systematic both with the same purpose of making money in the markets. One will use their own methodology and money management techniques too provide a 'model of expectation' whilst the systematic trader doesn't concern himself with the direction of the market, when his or her system provides a signal they trade it!"*

*"So what trader are you?" (AMT book 2003)*

I'll ask this question again, what trader are you?

I want to ask this because I want to highlight the 'Observed Phenomena' of the markets based on the recent break of the 3x27 lows (3704) as we continue on from the last chapter, and hopefully the answer to my question should be... *'I'm a two-type trader'*. Each individual trader needs to have embedded in the back of their mind the re-occurring patterns of the market structure based on the AMT methodology so we can trade derivative markets on a daily basis whilst trading equities using leverage over a medium and long term.

It doesn't matter what type of trader you are, the answers will be in the price structure based on what has been described throughout the book. Market dynamics and Market Risk help define the answers each individual trader seeks no matter what type of trader we all are.

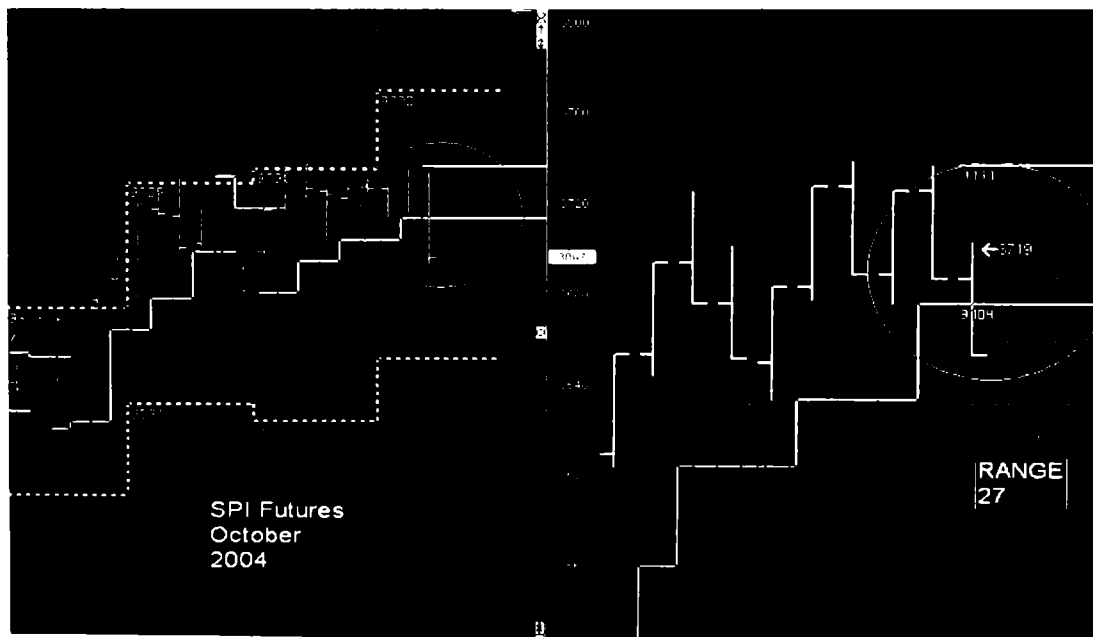


Figure 98

SPI futures 20/10/2004

There are a number of different styles of traders all looking at the same price action, a break of the 3x27 lows and movement of 27 points (3692) down before Market Risk is increased.

- A position trader looking for a move down as the new cycle is now a 'Sell'
- A short-term day trader looking of rotational moves within the cycle.
- A breakout trader looking for precise moves based on statistical movement of the range of price
- A systematic trader who only trades using confirming data based on price indicators
- A true mechanical systems trader who doesn't concern himself with anything other trading his system when it triggers regardless of price action.

A trader who fits themselves in any of the above groups, the same question needs to be asked? If this is the change of cycle where is price more than likely to go based on past price action?

What is the model of expectation for the future that all traders should have regardless of how each individual trades. What is our 'window into the future'?

Looking at the figure 98 our model is based on the re-occurring pattern of Price moving from one 3-day break to the next higher time frame; the weekly timeframe.

The movement of price from any 3-day break towards 3-week dynamic extremes as I've continually described throughout the book. So all traders should have a view that whilst price is below 3704 the movement to the downside could have 'an-Observed expectancy' that price should move down to 3652, the 3-week dynamics lows. Being October that movement has a high probability.

## Market Risk

I make the assertion in this instance that 3704 will define the strength of the cycle change, whilst below the market is weak. Above, the model of expectation is that price can swing upwards towards the central zones. Because the Australian futures market is a 24-hour market, when trading we must know and keep track of how the overnight market acts because this defines the market dynamics and defines our RISK.

As short-term traders we would normally only trade the day session, so the following day we are confronted with the market having broken 3704 and now closing in the night session at the 3702 just below 3704 after completing the 27 point move down to 3692. 3704 defines our Risk, again it doesn't matter what type of trader you are, if you believe the market will act in a 'Precise' manner then 3704 should clearly define the strength of the trend.

We can see the 'day' session open above 3704 and swings upwards, a movement of 27 points to 3719.

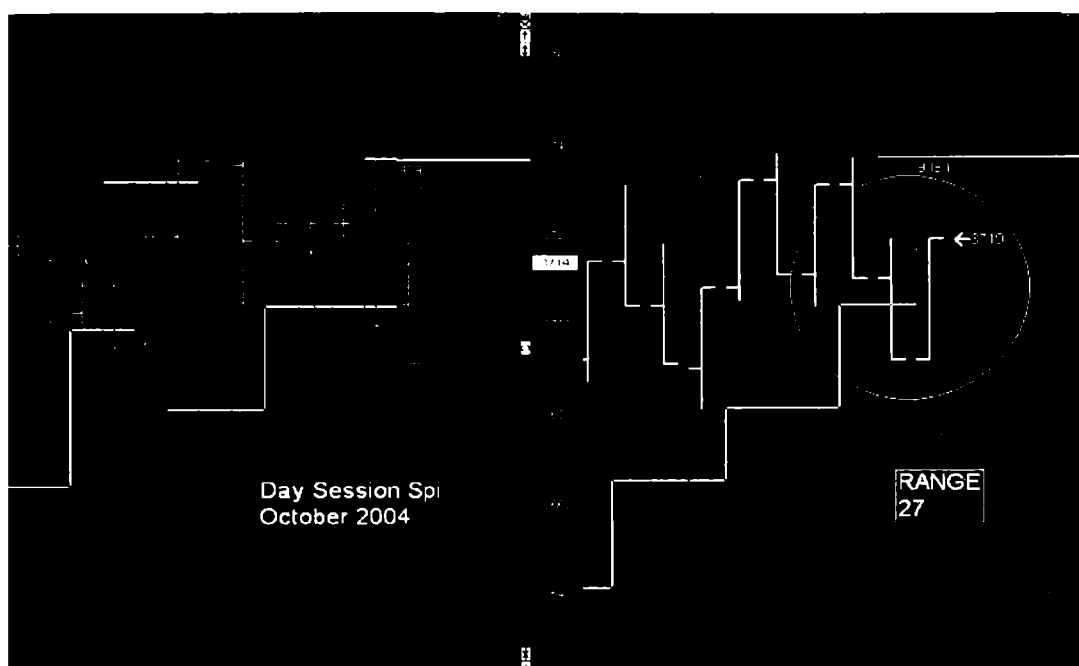


Figure 99

Spi 21/10/2004

We can see the 'day' session; Price opens above 3704 and swings upwards, a movement of 27 points to 3719. The day session only had a price range of 17 points but we can clearly see that the movement and stall occurs after the 27-point move upwards.

Any trader looking at the price action should come to the same conclusion that 3719 defines market Risk based on the statistical movement of the Range of Price.

## CYCLE CHANGE.

We have a 'cycle' change or a 'SELL' cycle in place. Until price can break the 3x27 highs then as trader's we still need to treat the market as such with 3704 as our guide.

Even though there was a break of a 3-R27 when the market would normally trend down, the day session opened above 3704. Once above 3704, the expectancy of over 85% is that the market needed to move higher based on the above systems and past 3719. The R30 goes neutral at 3722 and the R19 has a double bar in play so the market needs to go to 3727 to complete.

For all the systems that are LONG, the last remaining movement needs to go into the high 3720's before the expectancy of 'SELLING' can take place or a break of 3704 once again. And keep in mind based on 'Observed' the October 3-month dynamic highs are 3724, a Risk/resistance zone.

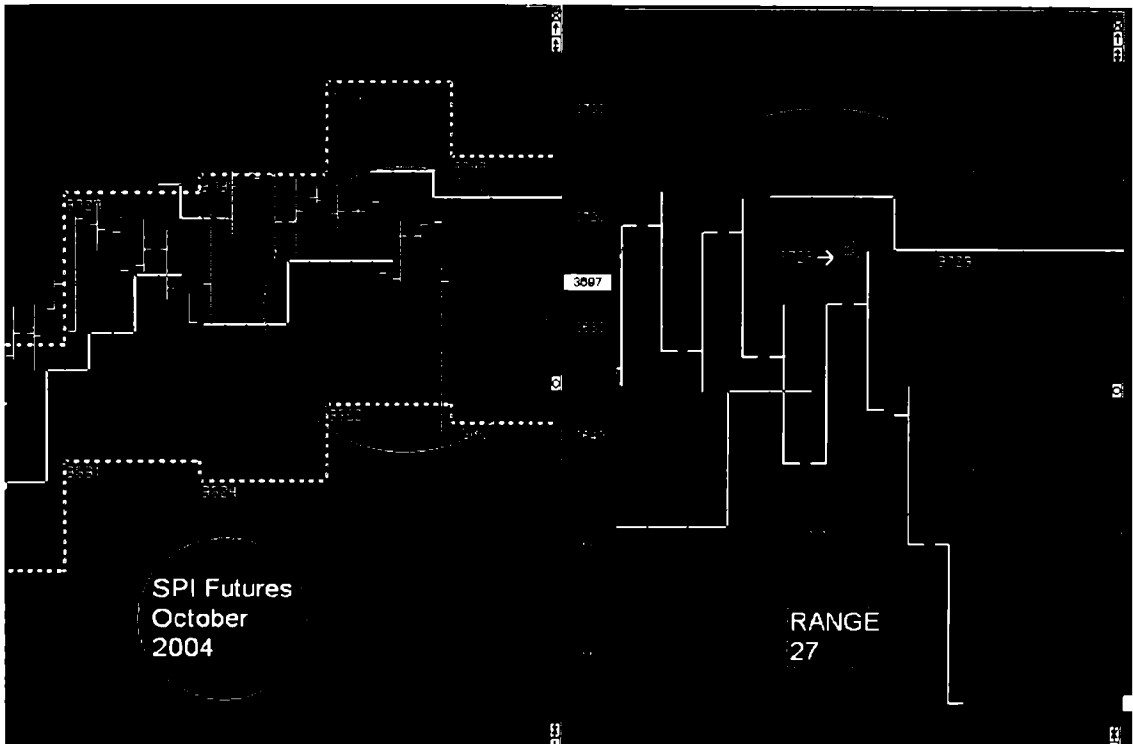


Figure 100 SPI: 22<sup>nd</sup> & 23<sup>rd</sup> October 2004.

The exact high before the SELL off was 3728, the market then followed the re-occurring pattern of the 3-day break towards the 3-week dynamics extremes after the 2-day stall. Once price broke 3704 again, it was all down hill without a pause towards the 3-week lows of 3652 before bouncing and closing at 3697. (Keep in mind we are still trading above the yearly high 3645)

After this move down to the 3-week lows since the cycle change, the timing is now conforming to a Bradley date of the 25<sup>th</sup> October 2004.

If this is the case will the market begin another wave upwards? And how are we as traders' going to trade it?

Firstly, let us have a look at the movement of Price...

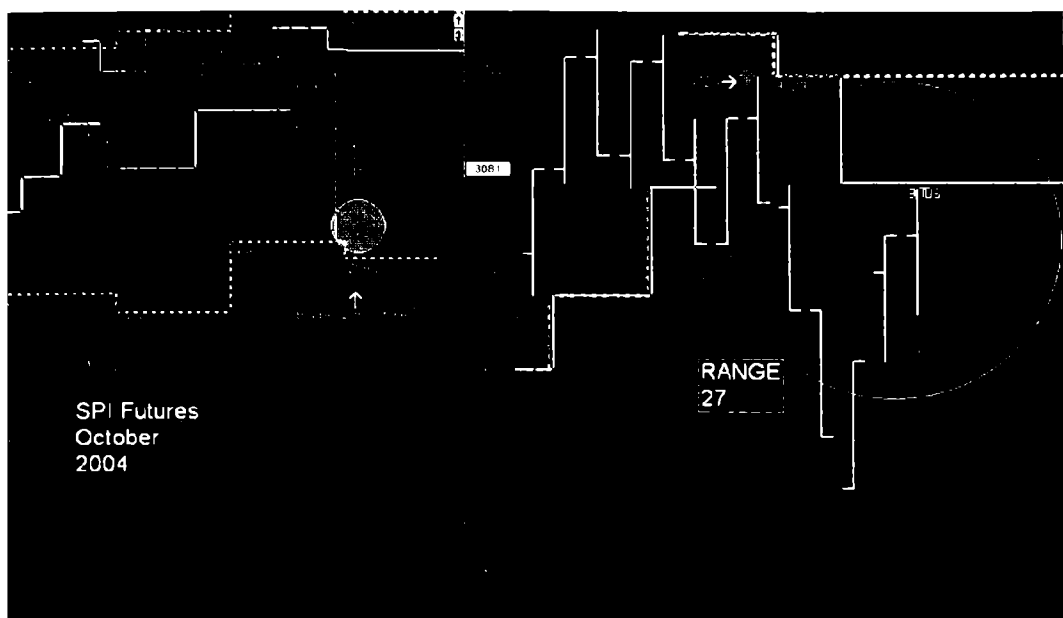


Figure 101. SPI 25<sup>th</sup> October 2005.

On Monday the 25<sup>th</sup> October we can see the 3704 is still defining the strength of the trend. It was resistance and on this day it closed near its lows. However look at the price structure of the 3 period highs of the 27-point range, those 3-period high have now dropped to 3705, will it be resistance or will it break?

If it breaks our model of expectation is the movement of 27 points from the recent lows. No Matter what type of trader you are we still operate under the same statistical pattern repeating.

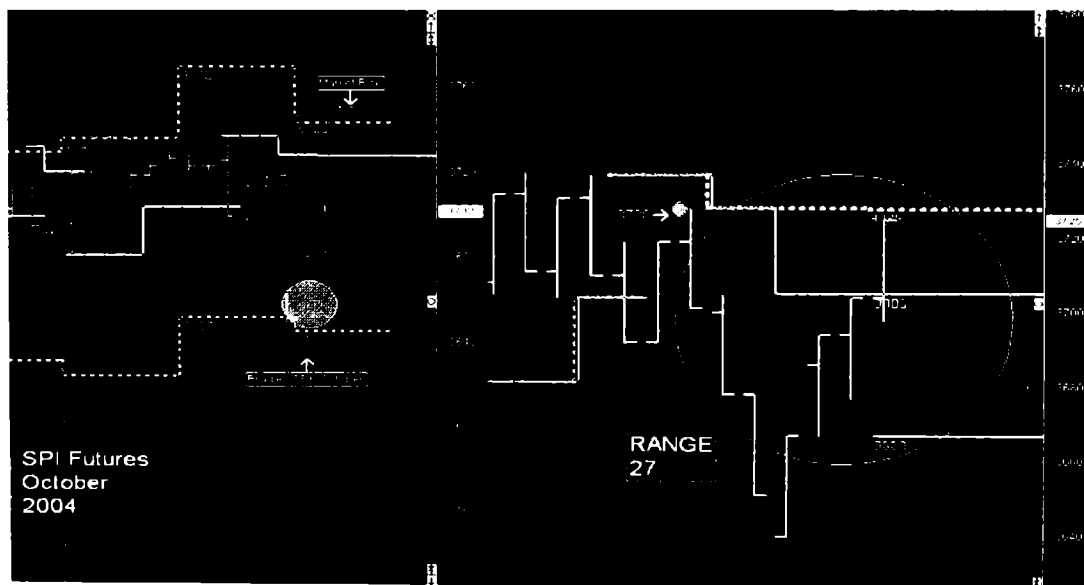


Figure 102. SPI 26<sup>th</sup> October 2004.

The market breaks 3705 and our move is based on the same 'Observed expectancy' of completing after breaking 3705 or 20 points from the recent lows.

In the same chart we have another line of 3728, this is actually the highs of the past 3-days, for our confirming move of a break of 3728 then the same model of expectation would be a break of the 3-day high towards the 3-week highs of 3743 is something all traders no matter how you trade would become part of your own expectancy.

If 3728 breaks the next day, does 3743 define Market Risk again, should traders look for the discretionary reversal of 18points (double r9 down) from this level.

Lets see what occurs...

Keep in mind two things on any break, a move towards the 3-week highs and a 27-point move. The 3-week highs are 3743 but what is our 27-point move on the break of 3728...

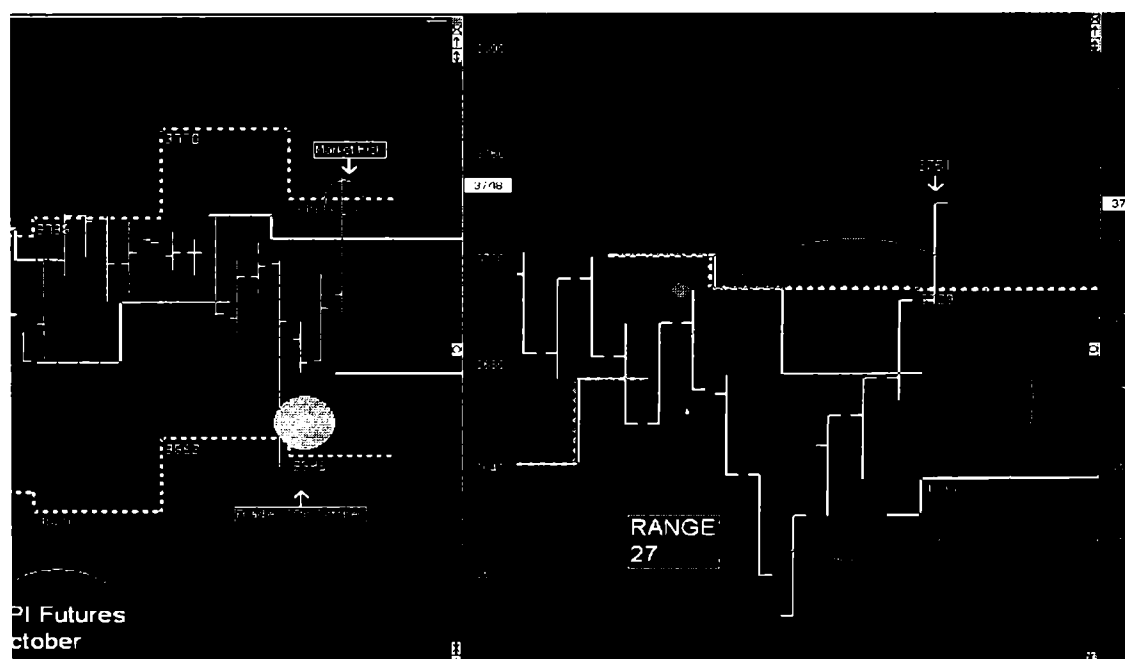


Figure 103

27<sup>th</sup> October 2004.

The actual low of the 27 point move takes price towards 3751, the reversal from the 3-week highs of 3743 was actually open to market RISK based on the Range of 27 points, the important part of this break is it confirms a Breakout of the TIMEFRAME. Price can remain outside 3743 for the remainder of the week and will try and chase the new 3-week dynamics highs the following week.

We can see in the following chart the market reversing from 3751 down to 3743....

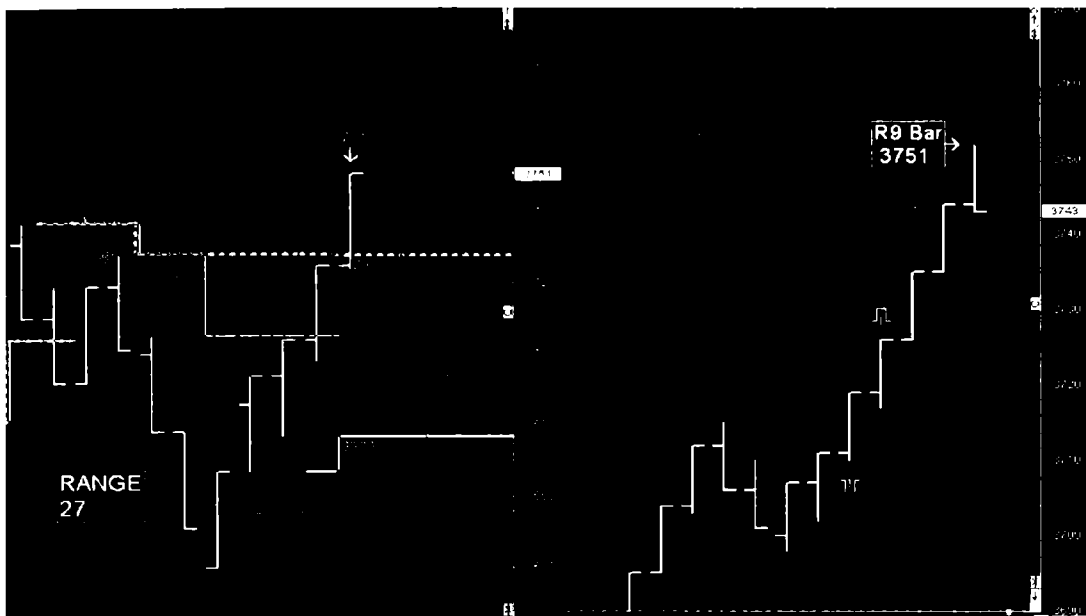


Figure 104

27<sup>th</sup> October 2004.

### In Conclusion...

*"We can visualize the trading opportunities through the use of Time. As 'Time' is the only know factor in the market that can be know in advance, and we subscribe to the belief time is forecastable, then its is acceptable to believe that what ever happens in the past will somehow affect events in the present and which in turn affect events in the future (chapter1 AMT 2003)."*

If Time is important and repeatable then we must subscribed that the same patterns will occur with high frequency....

*"When TIME is involved, it becomes a conclusion, not a prediction. When this similar pattern or breakout occurs in any 3 period dynamic range, whether it's the 3-day, 3-week or in this case the 3-month, these is a high probability that price will remain outside this break until the new timeframe begins, and can chase the new dynamic range in the next timeframe," (AMT book2003)*

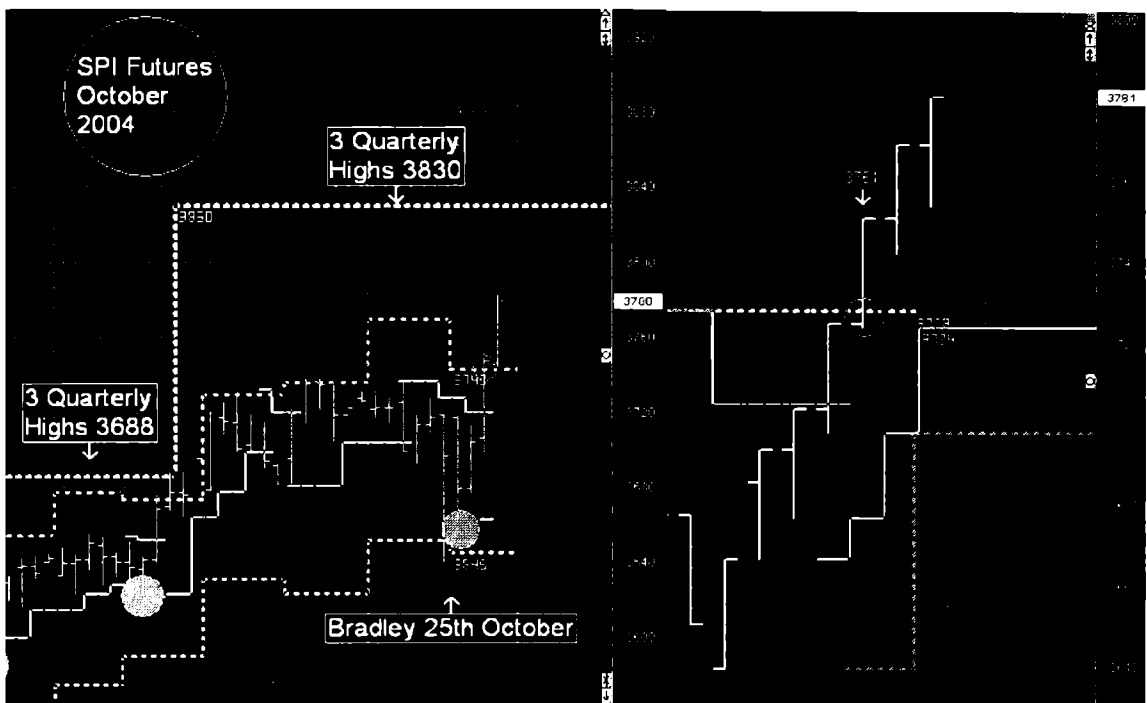


Figure 105.

As we can see the break from one timeframe will move into the next dynamic timeframe. The 3-week high is 3836 and the movement was to this extended price of 3836. The precise movement of Price over TIME and when once again look at the higher timeframe for our ultimate probable target within this quarter, that being 3830.

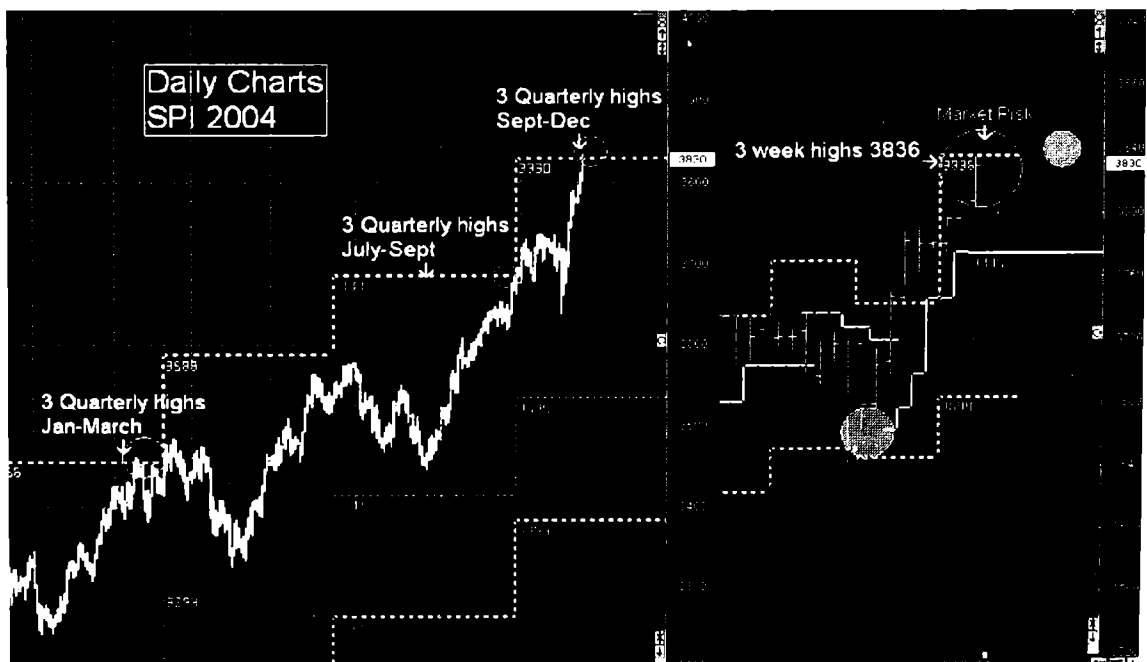


Figure 106.



Then we can the same price action again, a breakout of the timeframe and extended movement towards the 3-month dynamic highs (next) for November of 3900. Again we can the next Bradley timing from the 12/11/2004 and next up move. Note: The support 3830 and Quarterly highs provide along with the 3-day Gann cycle.

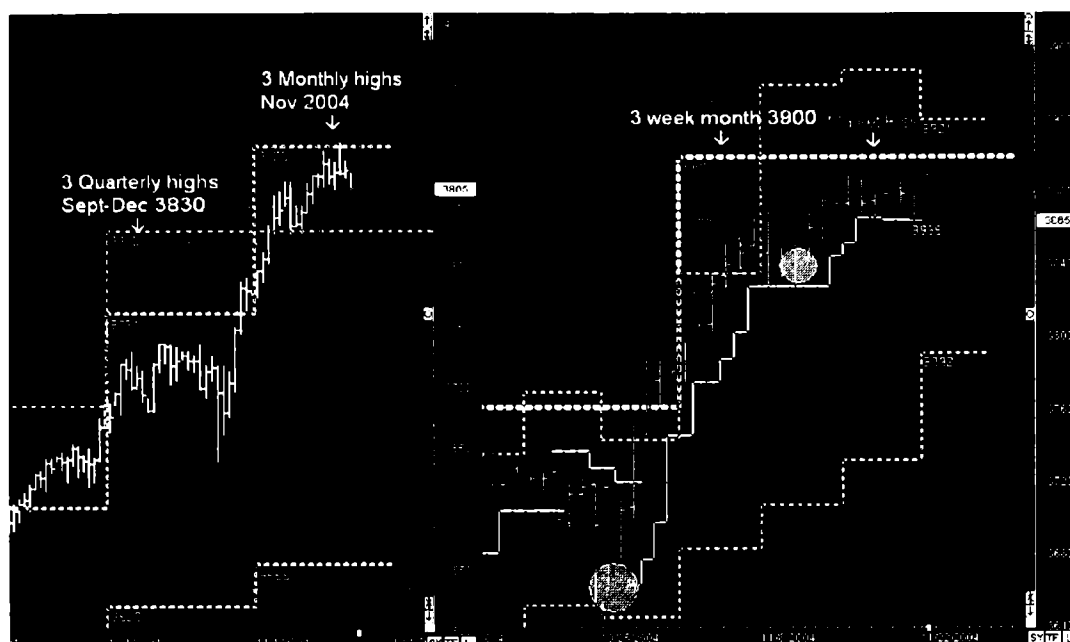


Figure 107.

## Primary Cycle.

We are coming to the end of 2004 and realise that the beginning of the New Primary Trend is about to begin for 2005. As traders we continue to view the market using the cycles and introduce new dynamic ranges beginning with the Yearly, Quarterly, Monthly and so on.

When we look at the last trading day of the year and the close we use the new timeframes as guides for the following timeframe, from weekly, monthly and so on. Using the Bradley dates for some might also help in timing any trades within the market structure if you choose to have some forewarning about possible change of trends.

We should already be operating under systems that provide us with the positive expectancy/positive dollar reward but we also want to be able to capture the major moves in the market. Remember most systems we develop are based on the style of trader we are, if our focus is on short term trading systems we rarely are able to capture the major moves. Why? Because day traders will normally exit any trade at the end of the day. Why exit if we have some forewarning that a prominent move is about to take place.

When we look at past price action we can see in Figure 108 that price has broken out above the 2004 yearly highs and the Quarterly highs. Now on the last trading day of the year we can our target of 4467 in 2005, and for the first Quarter of 2005 we have our target of 4282.

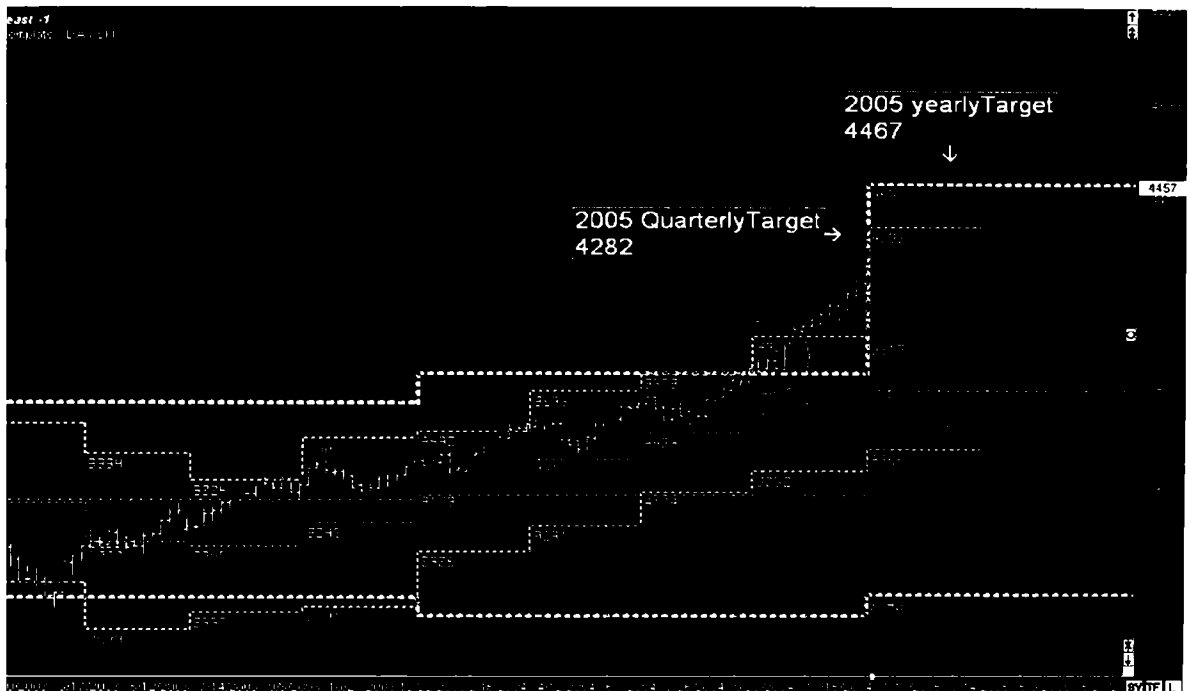
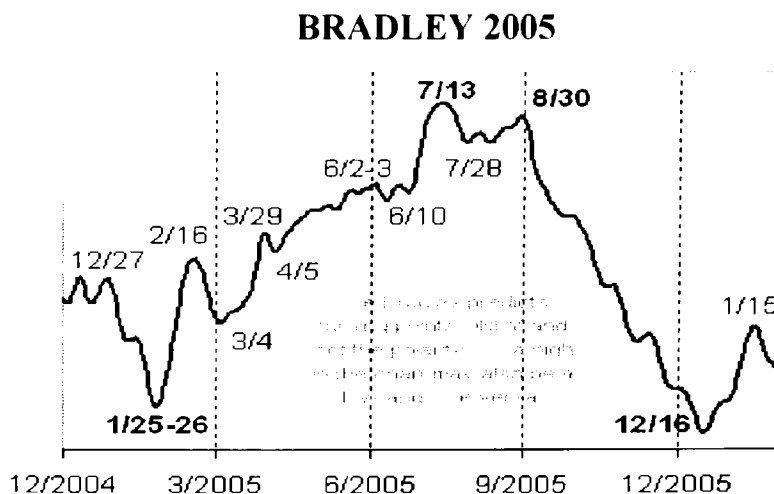


Figure 108

I go back to the phenomenal indicator that continually amazes me, The Bradley. Below is a Chart of the dates for 2005.



The dates above give us major turning dates on the 25<sup>th</sup> January up to the 16<sup>th</sup> February and so on...

Below is a chart of the SPI with the Bradley indicator super imposed over the price action. Keep in mind that we still don't know which way the market will go, however we have enough information regarding Market cycles and Market dynamics using the AMT methodology to trade the Bradley with great effect.

*Note: Don't rely on the Bradley indicator solely. It is a trading tool like the many other trading tools traders' use in the market. It must be used in conjunction with the positive expectancy dollar reward system individual traders should be operating under.*

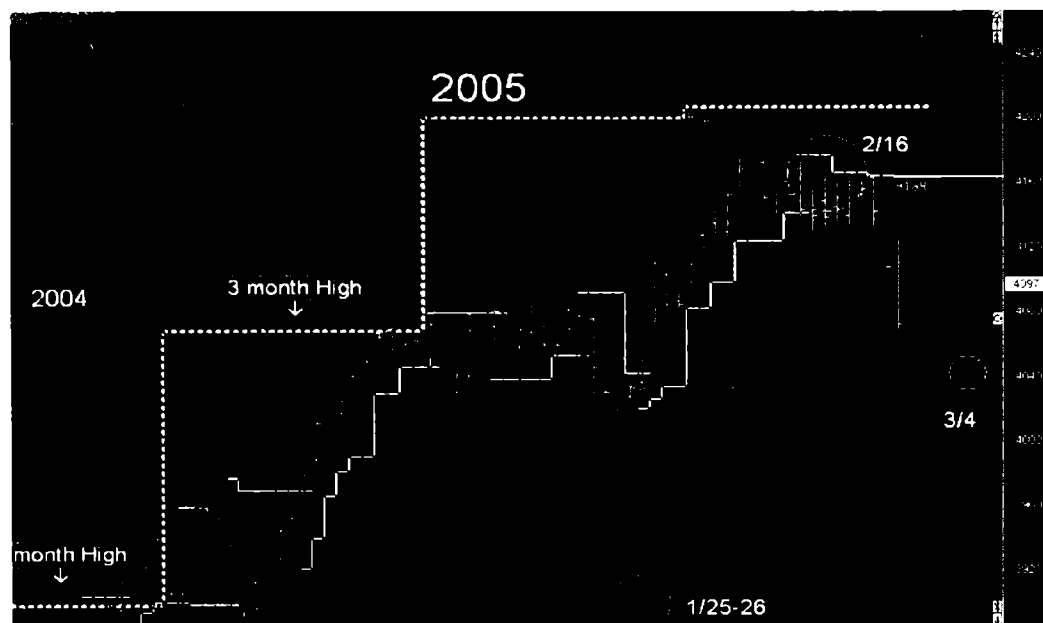


Figure 109

We can see how the Bradley in 2004 and now in 2005 allows us a 'window into the future'. The major rally in the market began on the 25<sup>th</sup> January and the top in the market was approximately around the next date of the 16<sup>th</sup> of February. All we as traders have to do is trade with the trend using the AMT methodology with confirming tools of the 3-day cycle.

## Systems Traders

Going back to the CODED systems as described in Chapter 8 and the numerous 'range-systems' that were highlighted over the course of the trading year of 2004, we can see how profitable they were using the principles of **Range of Price and the core theory of the facilitation of Price over Time**, or the rotation towards the central zones as Time moves forward. For short-term intra-day traders who want to make a living trading, the theory of this phenomena is what I've found to be the best way of making money in the markets, no matter what index or futures market you trade.

There were numerous individual systems highlighted, beginning from the 30-range down to the 8 point range systems, and depending on the conditions of the market, the systems will trigger more often if the market is consolidating. If the market is trending, as we can see over the past year, the systems will generate less. So how do we overcome this?

Basically traders can do two things, use the Bradley to great effect and trade the 3-day break towards the 3-week/3-month extremes or **combine the previous systems** from chapter 8. So instead of waiting for the market based on the DAY timeframes we combine the smaller range systems with another Range Bar system.

Firstly let's combine the Range 13 with the Range 8 systems.

Performance Results for ASPI IB Range 13 System Frank 9&8 From 11/22/2004 15:01 to 3/5/2005 02:14	
Gross Profit	620.00
Gross Loss	-136.00
Net	484.00
Profit Factor	4.56
Total Trades	62.00
Total Winning Trades	51.00
Total Losing Trades	11.00
Average Points per Trade	7.61
Percent Profitable	82.26
Largest Winning Trade	27.00
Largest Losing Trade	-29.00
Average Winning Trade	12.16
Average Losing Trade	-12.36
Ratio Average Win/Average Loss	0.98
Average Trade	12.19
Max Consecutive Winners	22.00
Max Consecutive Profit	280.00
Max Consecutive Losers	2.00
Max Consecutive Draw Down	-32.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

As you can see, the market over this 4-month period has triggered enough to provide a valuable system. The exit price is 13 points based on the variables of both systems. However the reward is random, as I have previously mentioned in the chapter on Systems development.

Lets combine the 11-range with the 9-range....

Performance Results for ASPI IB Range 11 System Frank 99 From 11/22/2004 15:01 to 3/15/2005 10:27	
Gross Profit	612.00
Gross Loss	-92.00
Net	520.00
Profit Factor	6.65
Total Trades	44.00
Total Winning Trades	36.00
Total Losing Trades	8.00
Average Points per Trade	11.82
Percent Profitable	81.82
Largest Winning Trade	47.00
Largest Losing Trade	-37.00
Average Winning Trade	17.00
Average Losing Trade	-11.50
Ratio Average Win/Average Loss	1.48
Average Trade	16.00
Max Consecutive Winners	10.00
Max Consecutive Profit	168.00
Max Consecutive Losers	2.00
Max Consecutive Draw Down	-37.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

The system doesn't generate as often because the Range 9 will occur less frequent but the average reward is greater even though both return similar profits over the same course.

Now we combine the shorter Ranges with the larger ranges. This one is based on the 9-point range and the 14-point range...

Performance Results for ASPI 18 Range 9 System Frank 99 From 11/22/2004 15:01 to 3/7/2005 10:13		Performance Results for ASPI 18 Range 8 System Frank 99 From 11/22/2004 15:01 to 3/7/2005 10:12	
Gross Profit	911.00	Gross Profit	910.00
Gross Loss	-307.00	Gross Loss	-276.00
Net	604.00	Net	634.00
Profit Factor	2.97	Profit Factor	3.30
Total Trades	113.00	Total Trades	124.00
Total Winning Trades	79.00	Total Winning Trades	92.00
Total Losing Trades	34.00	Total Losing Trades	32.00
Average Points per Trade	5.35	Average Points per Trade	5.11
Percent Profitable	69.91	Percent Profitable	74.19
Largest Winning Trade	36.00	Largest Winning Trade	34.00
Largest Losing Trade	-26.00	Largest Losing Trade	-44.00
Average Winning Trade	11.53	Average Winning Trade	9.89
Average Losing Trade	-9.03	Average Losing Trade	-8.63
Ratio Average Win/Average Loss	1.28	Ratio Average Win/Average Loss	1.15
Average Trade	10.78	Average Trade	9.56
Max Consecutive Winners	8.00	Max Consecutive Winners	7.00
Max Consecutive Profit	126.00	Max Consecutive Profit	94.00
Max Consecutive Losers	5.00	Max Consecutive Losers	3.00
Max Consecutive Draw Down	-67.00	Max Consecutive Draw Down	-63.00
Maximum Open Interest	1.00	Maximum Open Interest	1.00
Maximum Open Interest Average	1.00	Maximum Open Interest Average	1.00

As you can see the frequency of trades has skyrocketed, and when we combine the 8-point range with 13-point range the same applies. Below is a combination of 13 and 27 points.

Performance Results for AP4U24 Range 13 D System SPI R13-27-DA From 12/2/2004 15:09 to 3/24/2005 21:27	
Gross Profit	906.00
Gross Loss	-192.00
Net	714.00
Profit Factor	4.72
Total Trades	90.00
Total Winning Trades	76.00
Total Losing Trades	14.00
Average Points per Trade	7.93
Percent Profitable	84.44
Largest Winning Trade	45.00
Largest Losing Trade	-36.00
Average Winning Trade	11.92
Average Losing Trade	-13.71
Ratio Average Win/Average Loss	0.87
Average Trade	12.20
Max Consecutive Winners	17.00
Max Consecutive Profit	184.00
Max Consecutive Losers	2.00
Max Consecutive Draw Down	-54.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

When we take a close look at the previous systems in Chapter 8 based on individual bars compared with the combined systems, the 'profit average rewards' and 'expectancy' is similar. However, the big difference is the frequency of trades, an increase even when the market is in a trending period. The perfect tools for short-term intra-day traders looking too make a living in the markets.

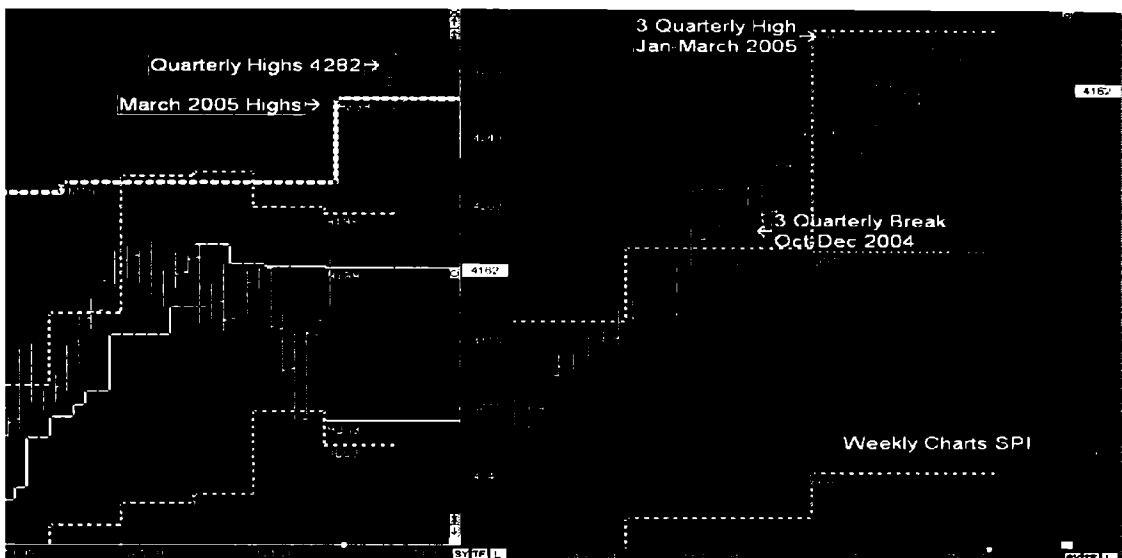


Figure 110.

One thing traders should always keep in mind is the contract month coming into expiry. Once the contract expires the SPOT contract will no doubt match the extreme of the preceding contract. For Aussie traders keep in mind that the 3-period Primary (yearly) extreme broke and closed above in 2004. This is the first time in over ten years this has occurred.

If we follow the same sequence of events of the market moving from one extreme into the next 3-period extreme, then the 3-yearly highs is something we need to focus on for any long-term analysis or target, that is 4467. We can see that the same **phenomenon has just occurred, the break of the Quarterly period in 2004 and the move into the next 3-period Quarterly period in March 2005 (4282)**. It might not go as high as this primary dynamic range of 4467, however for any long-term analysis of the markets and the repeated patterns based on dynamic break of a 3-period timeframe then we would have the expectation of the market moving towards the next 3-period dynamic range as we have seen happen throughout this book.

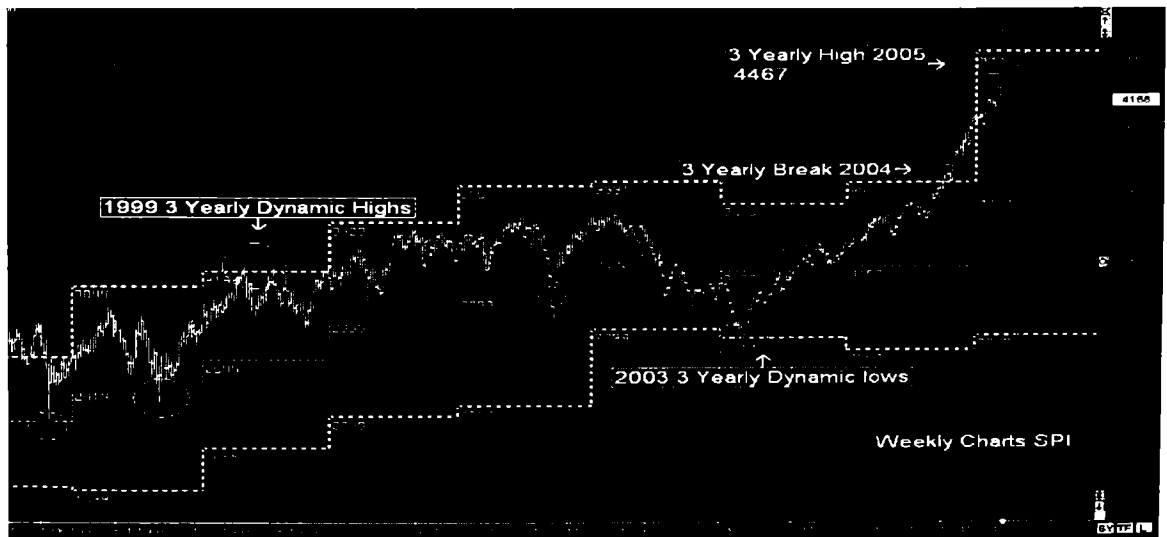


Figure 111.

We can see the market rotating between the 3-Yearly dynamic ranges and the use of the 50% level in each year to define the strength of the trend.

We should now have a total understanding of where the market is likely to go, when the best time too enter and exit any trade using the rotational method of systems development and the Range of Price, whilst the trends and cycles are clearly defined using Market Dynamics of higher timeframes whether it is the Australian Markets, the DAX or US markets.

The following chart shows the E-minis and the 3-period monthly dynamics using the 618 from the new 50% level to determine the monthly dynamic ranges

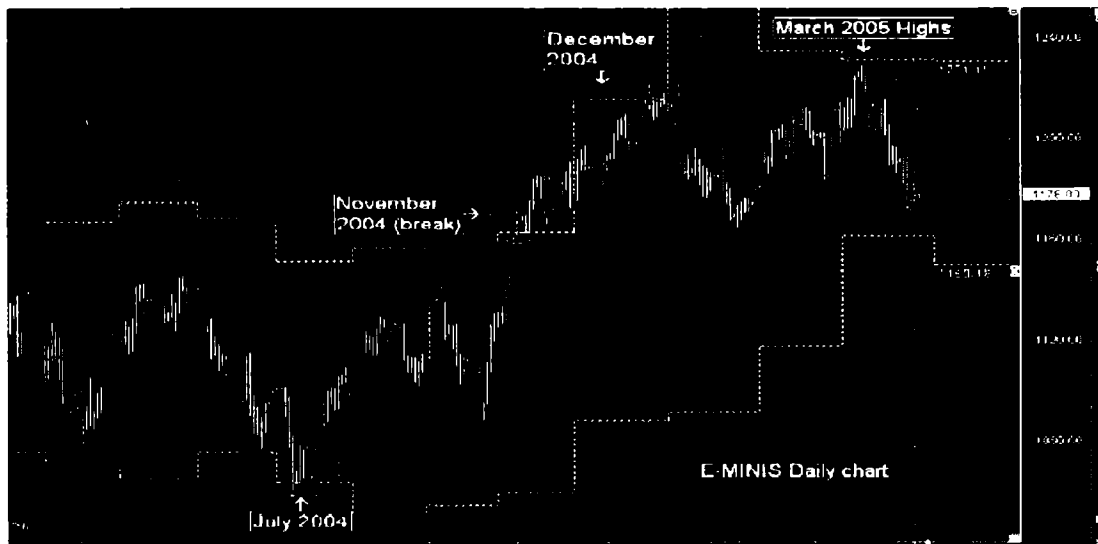
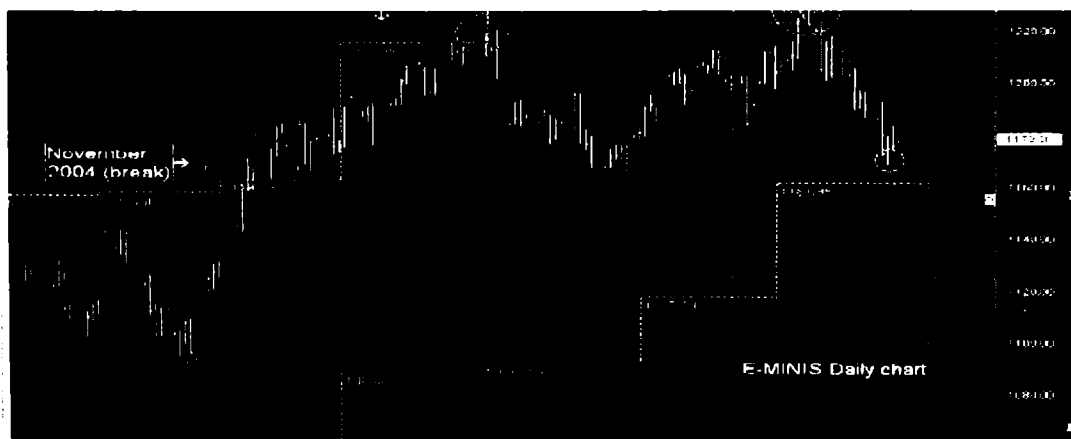


Figure 112

Market dynamics defines MARKET RISK. The zones can reverse or Breakout. A breakout and you form a view that there is an expectation of the market continuing with the trend until the next timeframe extreme, as seen with the November break in 2004 moving towards Dec 2004 highs. MARKET RISK is completely different to individual Risk and that depends on the style of trader you are. If you are a short term intra-day trader then the larger Market dynamics shouldn't play a major role, however it is always good to understand where Price is in relation to those higher levels. When we look at the Weekly Dynamics inside the Monthly Dynamics you begin to see the same movement on the E-mins once again... (figure 113)



The Red Channels are the weekly dynamics. Once the extreme is reached then MARKET RISK of the Trend continuing within the weekly timeframe is increased. As we can see last week, but for this week

those weekly dynamics are projected forward (1153.90) and the movement towards the Monthly lows (1161.44) has more of a chance of reaching.

The timeframe dynamics are generic for everyone; it is up to the individual to trade those dynamics as per their own systems; that can be discretionally or mechanically with their own individual money management rules.

This is the easiest way of understanding RISK based on Time. No point holding shorts if the market has already reached the weekly dynamic lows (.618x4) on Wednesday for that current week as shown in the Figure 113. For swing traders then RISK is on your side until the timeframes ends depending on the style of trader you are.

The Market has a certain path it follows and along with Market Cycles, Market Dynamics, and the Range of Price traders should have a better understanding of the Market.

Confirmation of a Cycle Break and a Bradley date in conjunction with each other is ideal for Trend traders with the expectation of the movement of Price from the 3-day break towards the higher timeframe extremes.

Lets follow the sequence of events following the current market action.

Three things I'll be focusing on will be the 'Observed Phenomena' of Market Dynamics of higher timeframes, 3-period 'Market Cycles' that defines the Trend, and 'Range of Price' and Systems development.

This chart shows the continuation of the market from the Quarterly highs of 4282 and moving towards the 3-week dynamic lows 4144 and then next wave down in the next weekly timeframe of 4107. Each circle highlights the support and reversal from those 3-week lows... We have made a conclusion that this week the market is exhausted based on the 3 week lows of 3107; I have identified Market Risk for the current week based on this Observed Phenomena.

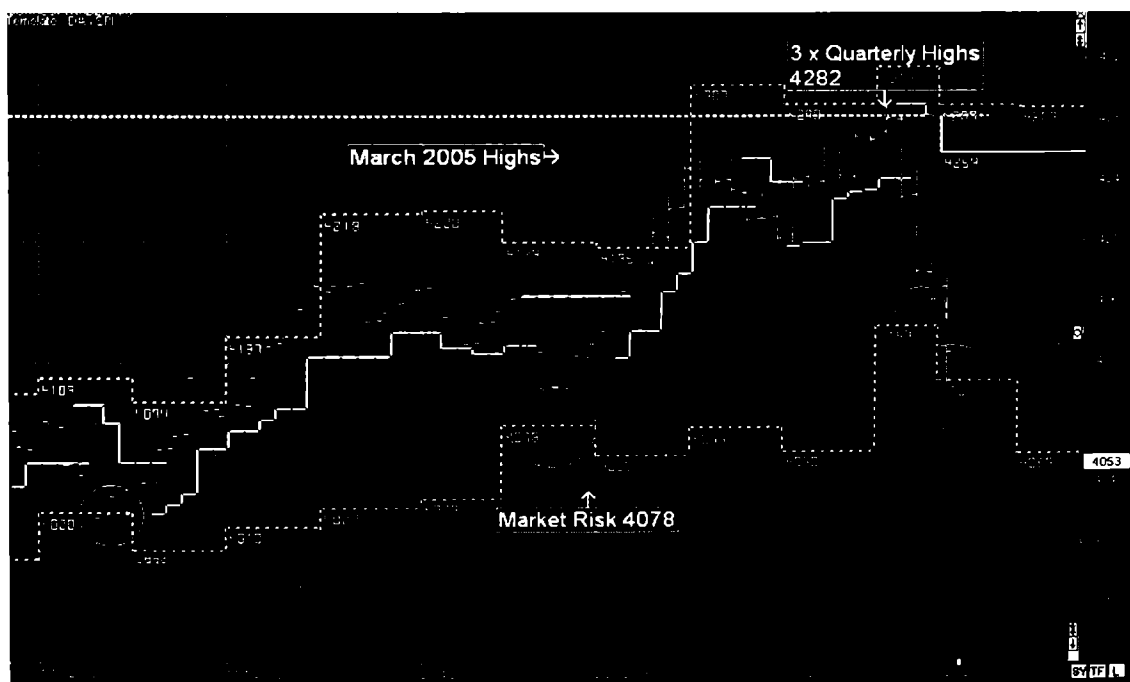


Figure 114



When you look at the accompanying chart of the 27-point Range bars, we can see the movement of the 27-point ranges along with the 3x27 point cycles that confirms any cycle change of the trend.

The green dots show the bounce and reversal off the 3-week lows with each swing a minimum of 27 points.

The blue circles show the change of trend as it clean breaks the 3 bars of the 27 points waves.

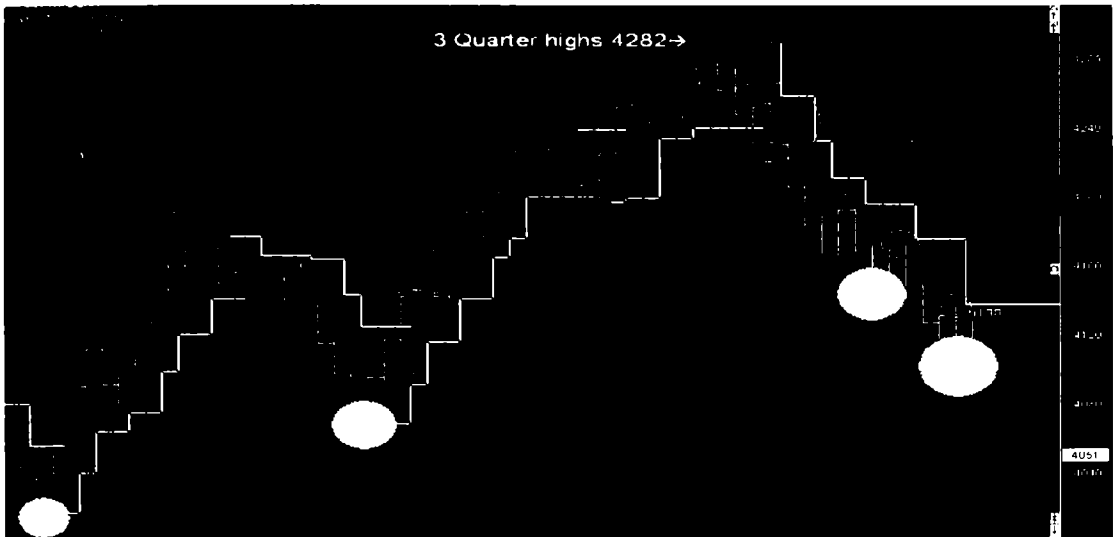
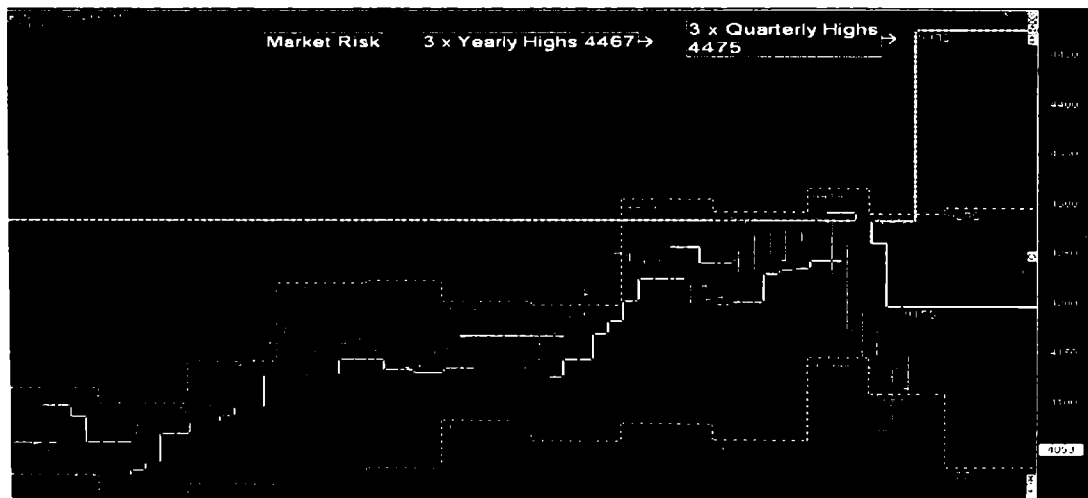


Figure 115

For Day traders, the understanding of Price moving in optimum Ranges is a must, and SPI trader's it is based on 27-point waves. Each swing for short-term traders is based on the 27 point move with an expectation of Risk increasing after each completion, as seen with the two recent upswings of 27 points before the market has continued lower towards the new weekly extreme dynamic lows. On the 31<sup>st</sup> March 2005 we have had a close of the higher timeframe time periods, the monthly and Quarterly. When we look at the Quarterly Time period we can actually see the dynamic for the new quarter to 4475, this goes close to matching the yearly highs of 4467, so for this quarter we have a higher probability of the Market moving to that extreme target where we then make a conclusion that for 2005 the market is deemed 'Market Risk' for the time period. That basically mean for the remained of the trading year. Well that is what my conclusion will be.



When we look at the 3 monthly 50% level we can see 4144 as a price that defines the strength of the trend, along with the 3-day cycles and we can see the for the 1st April 2005 the Monthly bias is weak (trading below 4144), the 3-day cycle is a 'Sell' and the 3-week lows are points towards 4033.

Just by looking at price action you could make an observation that the current Price action is Weak and would favour the market falling towards the April lows of 3998.

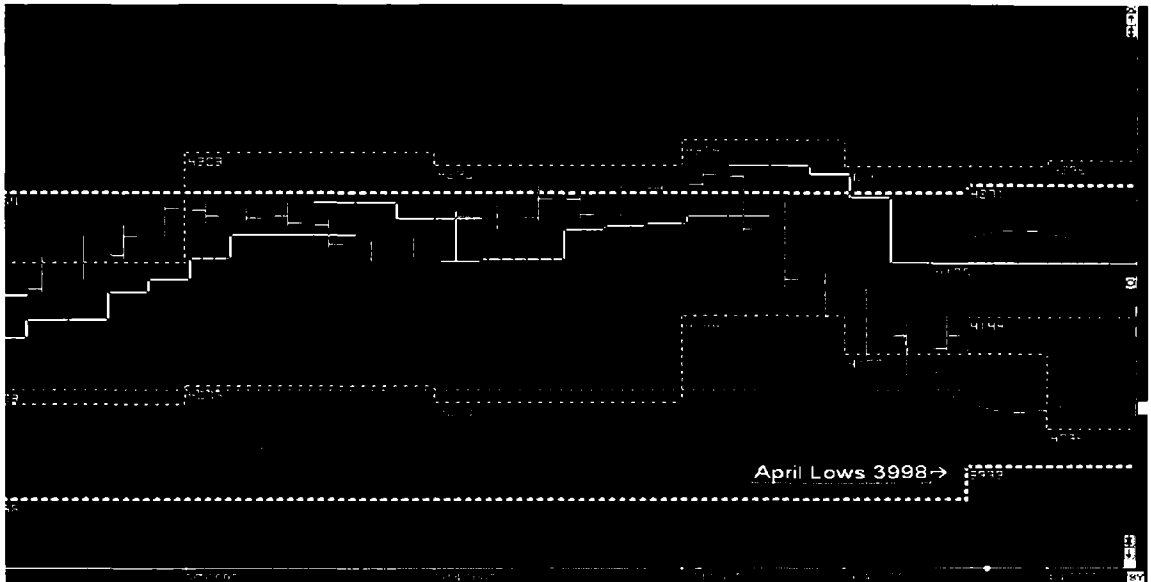


Figure 117

However....

What actually happened on the 31<sup>st</sup> of March?

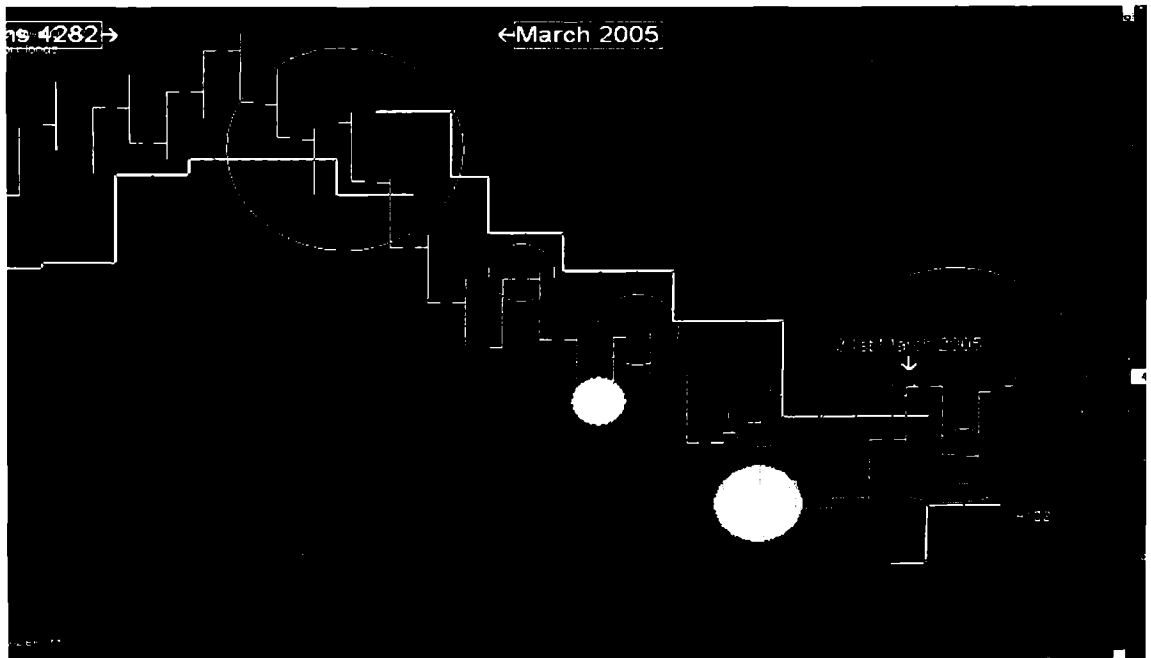


Figure 118

Note: Each Bar is 27 points

The 3x27 cycle change (4138), moved to a 27 point range high based on the low of the bar and reversed down another 27 points before swinging back and continuing with the Trend cycle of the 27 point moves.

Our optimum price range (27-points) was a step ahead of how FOD traders perceived current Market action at the close of those higher timeframes.

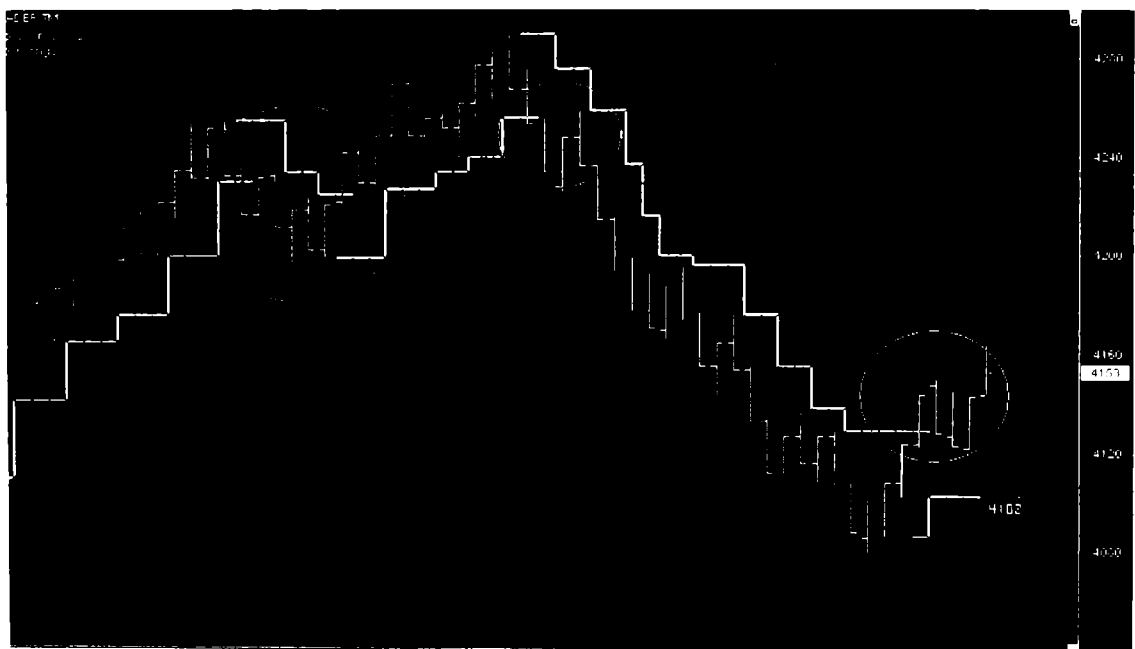
**Note: Always keep in mind that the initial move of any 3-period cycle change based on the Range of Price will move in an optimum range of completion, this can be for any 3-period cycle change and most Range of Price as I will describe in this chapter.**

The big difference between Time and Price and 3-period cycle changes is based on the criteria of each. For example, if you are using a 3-period cycle change and 60 minute charts then the expectation for Price to remain outside the break until the completion of the 60-minute timeframe. If Price breaks the 60-minute 3-period cycle at 10.45am then you have a view that Price will remain outside the break for the next 15 minutes until the 60-minute timeframe ends. The Trend can easily continue with the new cycle change and trend, but it can easily reverse and rotate back and that will depend on the higher timeframes.

BUT for Range of Price, the break and the expectation is for price to move that Price wave as the initial target. If a 21-point or 27-point 3-period cycle breaks then our 'model of expectation' is the move is going to be just that, a 21 or 27-point move from the recent range bar low, as seen above and a far better way at looking at intra-day trading and trading your own systems with exact price targets.

For example we have seen the 3x27 point cycles and movement of 27 point waves, but lets look at the 21-point cycle change.

The 27-point cycle change was confirmed with a break of 4138, however the 21-point cycle change at 4129 and the initial move was 21 points (low 4122 target 4143) but with the new target of 4143, it then confirms the break of 27-point break of 4138 so the moves continues.



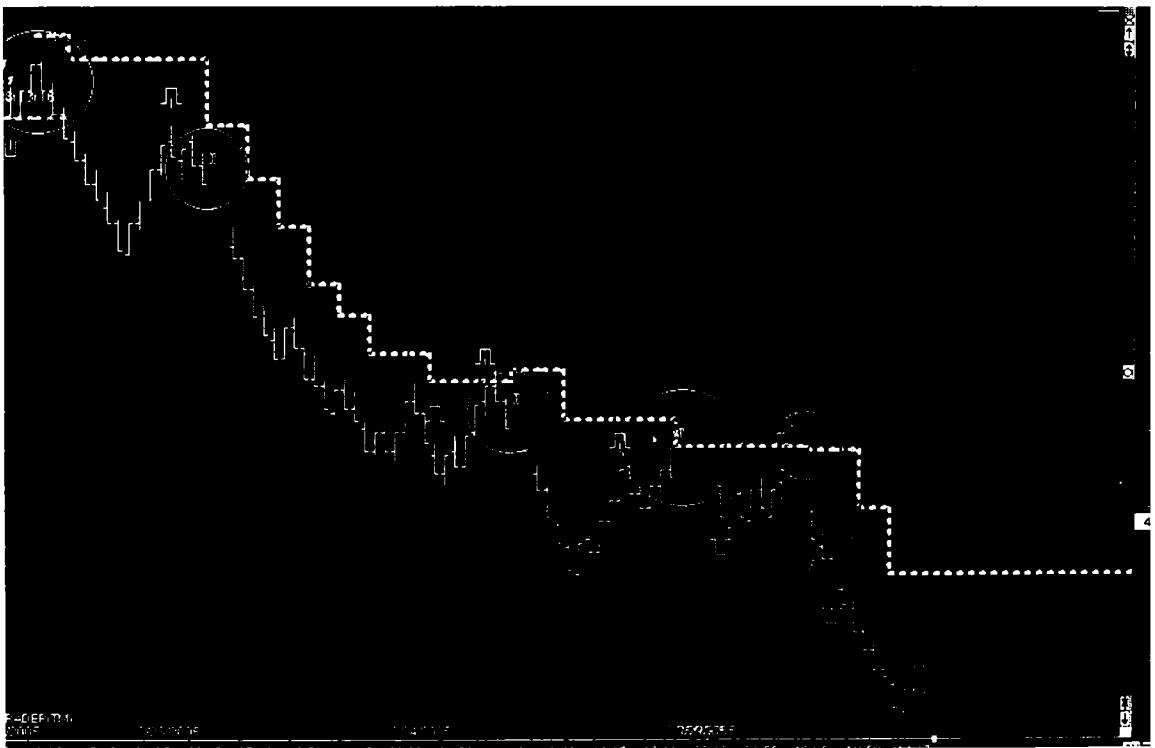
Even when we look at the recent highs after the failure of 4282, the 21-point cycle change preceded the major break of the 3x27-point break.

Now let's look at the use of systems as I have described before and the combination of the smaller range bars and large range bars. The first is based on the 8 Range bar and 13-range bar, keep in mind that the systems do not have any stops.

We have had a major break at the recent highs and as traders our initial view is for price to move from a 3-day break towards the 3-week extreme low. It is not a forgone conclusion but only a model of expectation.

When you look at the daily charts you would think price has gone straight down, but Price vary rarely goes in a straight line. Price has a Market Path for it to travel but it will more than likely rotate within itself as it moves to where it wants to go.

We as traders would like to trade this rotation of Price, some more 'Risk' adverse than others and that will depend on the trader you are.



**Figure 120**

**Note: each bar is 8-point movements:**

When ever price was rising towards the 13-point Range 3-period cycles the 8 bar system was generating **SHORTS** in the market, with the initial move a double BAR move where the system would generate **LONGS**.

So as traders, you could take you initial profit after the double bar is complete or over ride the system and exit when the first reversal bar completes 8 points from any lows, because then we would wait until the next 'SELL' signal triggers to re-enter.

When we look at the results, the expectancy on this shorter-range bar system and rewards are enough to subject ourselves constantly in the market, even though the Average points per trade is low but keep in mind the system is generating **LONGS** in a falling market.

<b>Performance Results for ASIPI 10 Range 8 System Frank 99</b>	
<b>From 12/22/2004 16:10 to 4/1/2005 14:26</b>	
Gross Profit	1,227.00
Gross Loss	390.00
Net	837.00
Profit Factor	3.15
Total Trades	148.00
Total Winning Trades	106.00
Total Losing Trades	42.00
Average Points per Trade	5.66
Percent Profitable	71.62
Largest Winning Trade	27.00
Largest Losing Trade	-65.00
Average Winning Trade	11.58
Average Losing Trade	9.29
Ratio Average Win/Average Loss	1.25
Average Trade	10.93
Max Consecutive Winners	13.00
Max Consecutive Profit	176.00
Max Consecutive Losers	4.00
Max Consecutive Draw Down	-65.00
Maximum Open Interest	1.00
Maximum Open Interest Average	1.00

Sequential 'Range of Price' trading is intuitive trading in a nutshell. Intuitive trading is pre-empting the market action, knowing before the outcome whether the odds of this trade will be profitable or not, whilst most price based systems that are systematic in approach are still trading without any probable outcome. A trader using sequential data must perceive the correct conclusion: each set-up works if and only if the trader trades the forecastability of that particular set-up. (AAT 2003)

When we look at the Figure 121 we can see that the first change of trend occurs when the 13 range cycle breaks at 4101 and the initial move is 13 points UP, then the Systems don't generate Longs until Price swings lower to 4111 and back over the 3-week lows Support zone of 4107 and then the sequence of events takes place as it moves along the larger range bars.

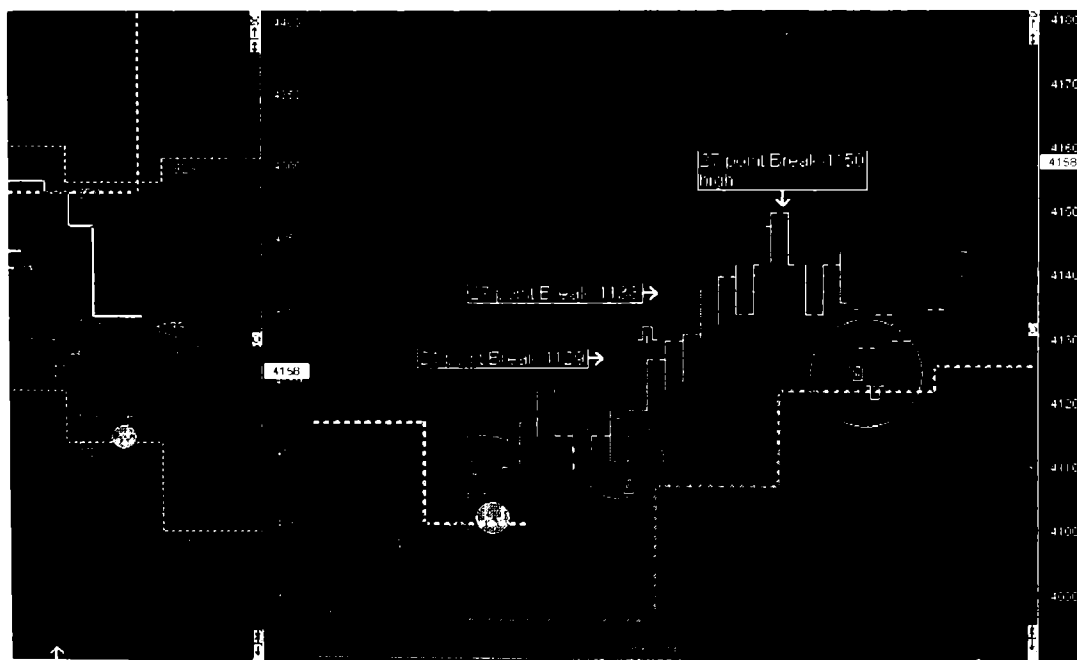


Figure 121.

Note: Each bar is 8 point

Basically, the shorter the range bar the more the 'systems' will trigger, however it is a must to look at the Market along with larger Range bar Systems and 'Observed Phenomena' of Market moving the initial Range of Price when ever a 3-period cycle changes.

It is the rotation of the Market that we want to trade as it moves with the Market Path based on Market Dynamics and Market Cycles of the Larger Ranges and Timeframes.

Depending on the type of trade you are, you should be able to understand the Risk Of the Market based on all the variables mentioned. For Day traders the more you would concentrate on the market based on shorter Range Bars. For medium term traders the more you would look concentrate on the larger Range bars, **but no matter what style of trader (intra-day, swing, trend-breakout) to RISK should all be generic for all based on CYCLES and DYNAMICS of both Observed and Coded phenomena's.**

### Looking at the sequence of events that occurred in April 2005...

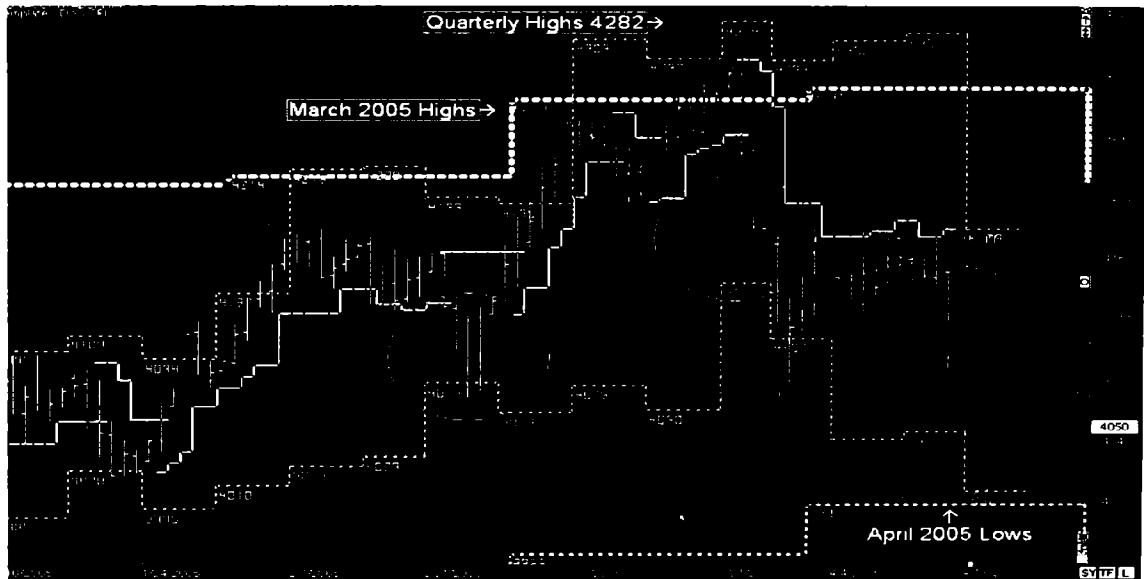


Figure 122.

We can see that the earlier swing upwards was stopped dead in its tracks around the 3-period daily highs without any 3-day confirmation close for a number of days and then Price has followed the same path towards the new 3-week lows of 4046 (exact low 4046).

I have circled each move towards the 3-week dynamic lows in the above chart, it occurred in January, February, March and April 2005 where the downside Risk of the market continuing lower in the current weekly timeframe is greatly diminished.

*"When TIME is involved, it becomes a conclusion, not a prediction. When this similar pattern or breakout occurs in any '3 period dynamic range', whether it's the 5-day, 3-week or in this case the 3-month, there is a high probability that price will remain outside this break until the new timeframe begins, and can chase the new dynamic range in the next timeframe," (AMT book2003)*

The above statement from the book in 2003 still holds true and for day traders the daily dynamics is something they would focus on as an 'Observed Phenomena'. Traders still need to understand Market dynamics, Market Cycles and the Market structure so we have a 'model of expectation' of the same patterns of price action occurring and reoccurring over and over again based on the 3 theories of the AMT market model developed by myself.

The dynamic break of the period timeframes confirms the breakout of the timeframe as described many times before no matter what timeframe we trade and we can see in February the day session opens below the dynamic daily (4125) timeframe confirming the breakout and we have a Market path target of 4078 based on the next weekly dynamic timeframe

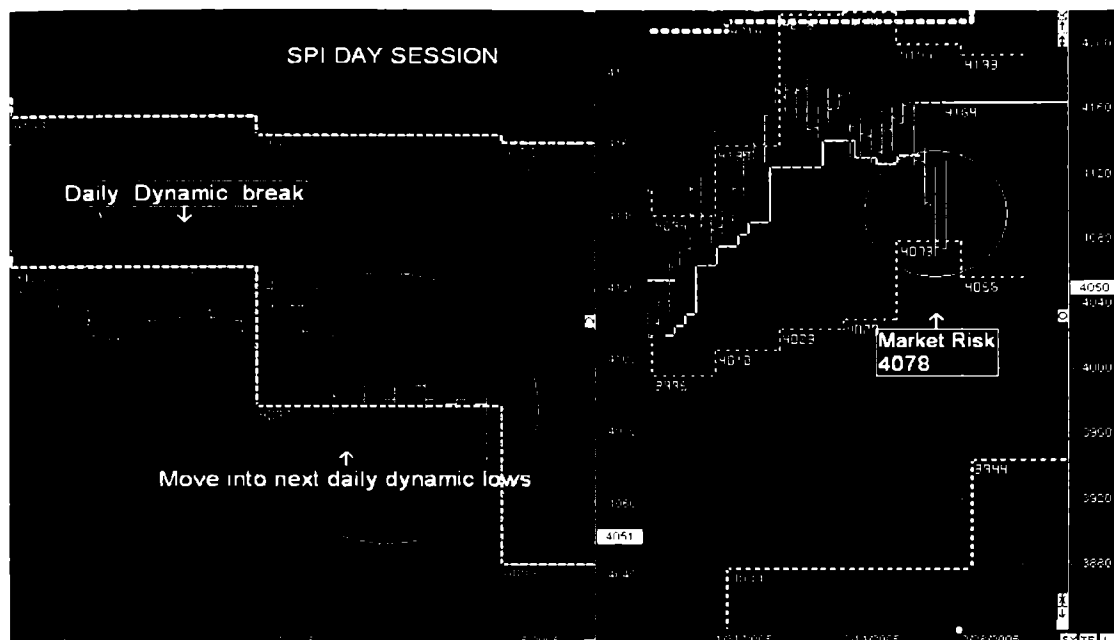


Figure 123

This price pattern has defined Market RISK on two occasions. Risk on any rotation trading below 4125 is high as the model of expectation is for Price to remain outside this timeframe for the remainder of the day and move towards 4078 is a high probability. Secondly, Market Risk of price moving lower than 4078 is low as the market has a high probability of rotating back upwards within this weekly timeframe.

**March 2005...**The same pattern of the day session opening below 4220 with the target of the 3-week lows of 4144 and then Price moved down to the new 3-week lows of 4107 with the daily lows of 4108 also supporting price.

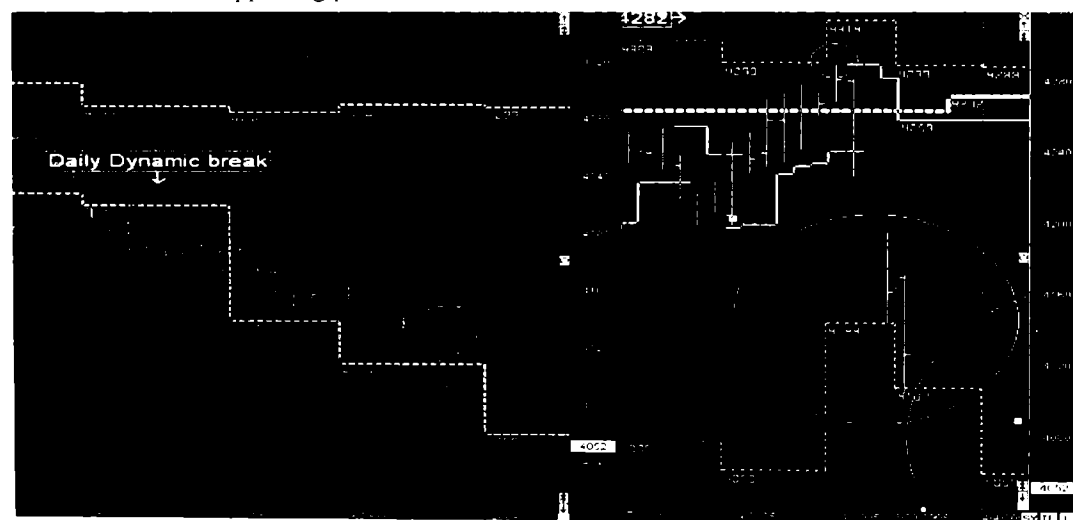


Figure 124.

There are so many traders trading the market with different discretionary methodologies and systems, however no matter the style of trader you are you should subscribe to the above 'Observed Phenomena' theory of these reoccurring patterns continuing.

So for rotational swing traders who are using systems the same Market RISK needs to be used. No point looking to BUY the open if the market opens below the daily dynamic lows as price has an expectation of moving towards the next dynamic timeframe extreme.

April 2005...

The same pattern has occurred in the April S&P off, an open below 4120 in the day session and Price has moved directly to the new 3-week lows of 4046.

We have defined Risk on these two occasions, a break of the daily dynamics (4120) moving to the Weekly dynamics of 4046, however in the day session Price has once again opened below 4065; the Daily dynamics.... "The dynamic break of the '3-period timeframes' confirms the breakout of the timeframe as described many times before no matter what timeframe we trade"... We should have an expectation that Price can remain outside this daily range once again for the remainder of the day.

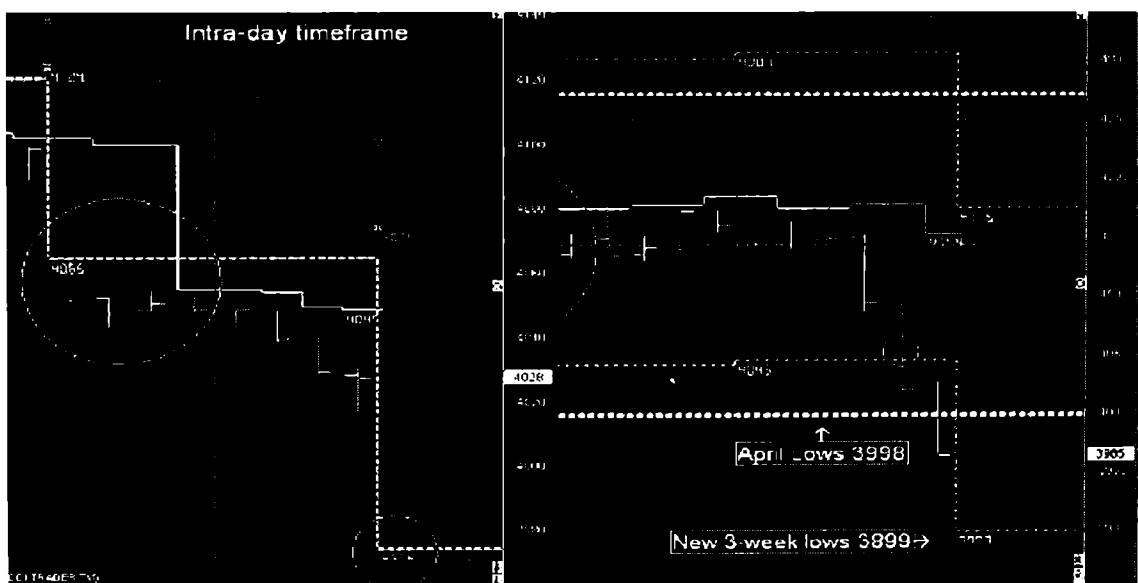


Figure 125

Traders looking for the 27 point swing upwards from 4046 (3-week lows) on this day is opened to Risk because this swing might not eventuate today (breakout) and there is a probability that because today is Friday, price could very well head towards the April Lows of 3998 based on the 3 month dynamic lows.

This is not a forgone conclusion that Price will follow that path towards the April lows, however we still subscribe to the belief that **MARKET RISK** is statistically defined by **Market Dynamics**, and today Risk is high because of Price trading below the daily extreme of 4065. **Because price is now trading below the past 3 months 50% level, our next reference on the downside will obviously be the 50% of the past 3-Quarters.**

This chapter will continue with the Market dynamic model because I want to trade the market based on my view of the market moving towards the 3-period Quarterly 50% (3961) and then watch for a confirmation for a major rally into the overall target of 4467 in 2005, a price move of more than 500 points. Day-trading the SPI can only go so far, if the market has the potential to





Even though there is no change of any 3-day cycle as yet, it is important to understand the bigger picture, because once price moves back above the new single monthly 50% level in May, price will begin its march towards 4467 after the consolidation of price above 3961 for a number of weeks. The price action around this level in April and May 2005 was perfect for the AMT systems to flourish as the market was in a tight rotation period for a number of weeks.

Posted 16-04-2005 08:06 AM 16.04.2005 08:06 AM

"I don't want to get into 'forecasting' but my view is from May 2005 we will have a better go at the market moving towards that 3 year dynamic high. I think a bit of consolidation until MAY and if that's the case then I'll be more than happy to BUY and Hold, of course with my own money management rules."

I'll be looking to re-enter stocks for a Buy and hold in late May... June has a habit of being a good month for stocks and in the US the market does like a summer rally, whether the market does head towards 4467 in 2005 is another matter but I won't discount it either.

I posted this in the Reefcap forum in April 2005 (edited) whilst the market was falling because I have an understanding that around May and using the 3-period Quarterly 50% level of 3961 as support it would set up a move higher from May and into June with a rally towards my ultimate target of 4467. I was now waiting for the right variables to re-enter the market using leverage on stocks. I'm now back as a 'two type' trader once again trading the SPI on a daily basis and leverage my positions on stocks for a rally of more than 500 points towards my target.

And Figure 127 shows the trigger of when the rally commenced...

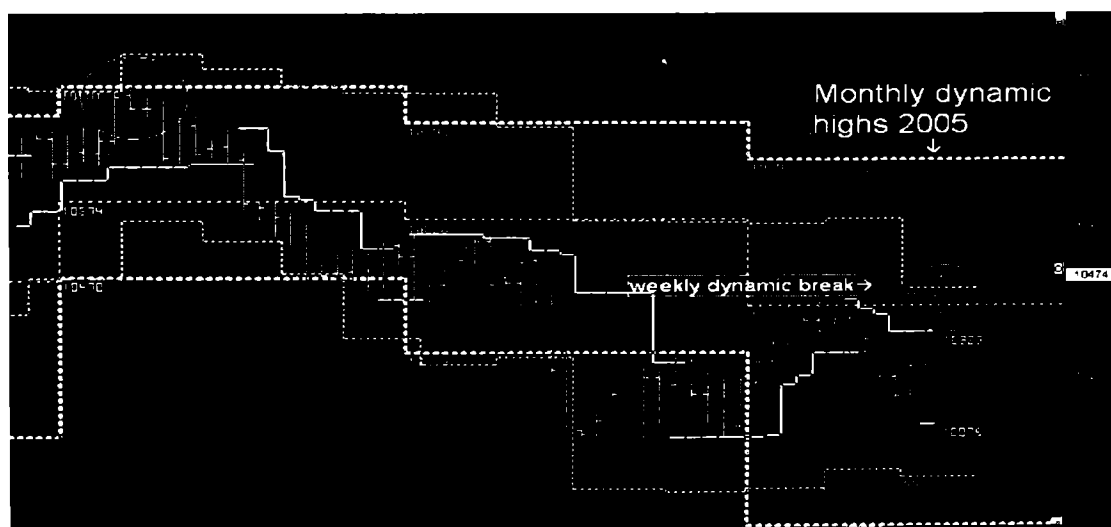


Figure 127.

The Dow was trading below the 3-period Quarterly 50% levels (blue) 10393, and on this day, price broke the 50% level and along with the 3-week dynamics highs, with the target of 10787 as the target. This was the start of the US summer rally and the trigger for our market. Remember the Australian market will still dance to the tune of big brother.


And on this day I posted....

AMTrade Group  Posted - 05/18/2005: 19:50:34

Australia  
440 Posts

It's the first step in a bullish scenario of what Aussie traders were waiting for and yesterday we saw the first step on the back of following the US markets. The DOW has actually broken the Weekly dynamic highs; something it hasn't been able to do in months.

**Just by looking at this price action if I was a position trader holding shorts I would be covering because this is very bullish and the run could easily take the DOW all the way back towards 10787 and our Market could ride on the back of it. Everything at this moment on the markets is totally going against the 'Bears and traders who are 'short'**

AMTrade Group  Posted - 05/27/2005: 19:35:08

Australia  
464 Posts

Currently I still don't see any weakness in the Markets, sure there is going to be short term down moves that will last a few days and they could be sharp but my view is that the summer rally in the US has come early and for SPI traders who like to forecast where the market is likely to go over the long term, I'll throw my two bobs worth and say we could be headed towards my 3 year dynamic highs of 4467.



Figure 12

**Note: Chapter 10 is the new chapter for the new edition of Analytical Market Trading and was not part of the previous three revised editions, including the never before seen Risk model based on the standard deviation of the daily timeframe.**

# Chapter 10

## STANDARD DEVIATION RISK TRADING

Over the past couple chapters I have spoken about the AMT systems and how they catch the ebb and flow of the market structure based on the theory of 'market rotation' as Time moves forward. The major problem is, most traders won't be able to develop the same systems or anything that resembles those systems. And this is what this chapter is about, the Standard Deviation of Risk based on the past 2 days whilst the market rotates within the 5-day cycle. Very similar to the SDC that was first released in 2003 and the first edition of the book, however this chapter gives the precise levels when defining Risk for each trading day. The SDC was about sequential trading and the bias for the trading day, but this chapter defines the levels for 'breakout' trading or when to trade the extremes of the range back towards central zones for each trading day.

The same principles apply based on what I have spoken about in this book, but this chapter will focus on which way the Optimum range bar will go, it gives the trader a clarity of the actual direction of the Bar and the trading day. I'll be using same indicator as in Chapter 5, the 'least square'. This indicator calculates the standard deviation of the past, and in chapter 5 the focus was on the rotation within the 5-day structure towards the 50% level using the standard deviation calculation. In this chapter I'll be using the channels, because these channels of the past 2-days of trading will actually tell us where RISK is. There is no point trying to trade from the extreme of the range even after a R9 reversal bar if price is outside the channel in question. The same principles apply when trading dynamic channels on timeframes but this time we are using the standard deviation model; outside the range and Risk is clearly defined.

The difference between timeframe dynamics and timeframe standard deviation is the theory of the two; one is based on projecting into the future, the latter is regressive in nature. The AMT dynamic channels are 'expansive' whilst the SD channels come together alerting us that a breakout is about to take place. However both still operate the same, outside the range and Risk is well defined and inside the channels and the market will rotate within itself as Price moves over Time, as this book has already described using the 3-day cycle and higher timeframe dynamics.

I want to briefly look at both the 5-day dynamic ranges and the 5-day SD ranges and the recent price action of the market selling off from the 3-period Quarterly highs in March 2005 (4282). I want to highlight that by using the 5-day SD channels a possible trending period for a number of days is about to happen, or the potential of the 3-day cycle change before it actually happens.

Figure 129 shows two instances of using the 5-day SD channels (red), outside the channels and the market will fall away as seen on the chart on the left, it informs us that price will more than likely move lower than actually go through a 2-day stall/swing upwards. We can see the same pattern of the 3-day break and into the 3-week dynamic lows of 4078. Once back inside the channel the market go through the usual rotation of price back towards the central zones.

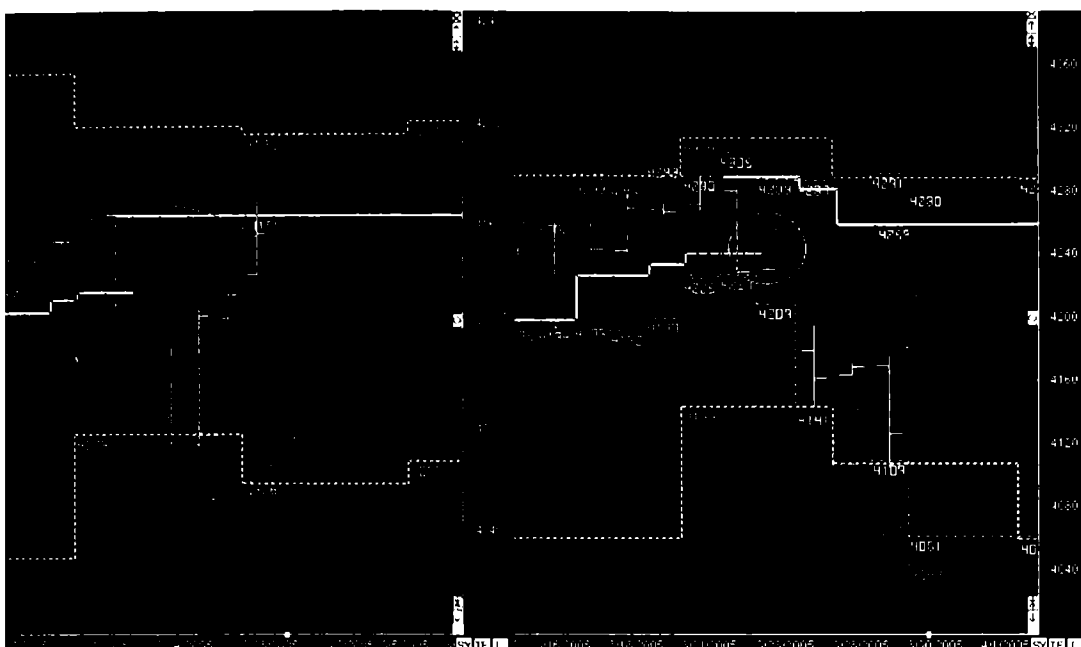


Figure 129.

The chart on the right shows the exact same price action occurring one month later, but this time I have placed the 5-day dynamic channels (blue dotted). The 5-day dynamic extends price, if we waited for a breakout of this range we would have to wait for prices to break 4209, whereas the 5 day SD channel was 4261, nearly 60 points above. That is why it is important in understanding the concept of using the SD channels because once the channel regresses towards one another then price is likely to break and move towards the higher timeframe extremes.

However I want to clarify one point, the price action is still a random outcome, the model of dynamics is generic because of the statistical repeatable patterns as shown in Figure 129, however it's not always a foregone conclusion, because once back inside the channel price can reverse and rotate within in itself the following day.

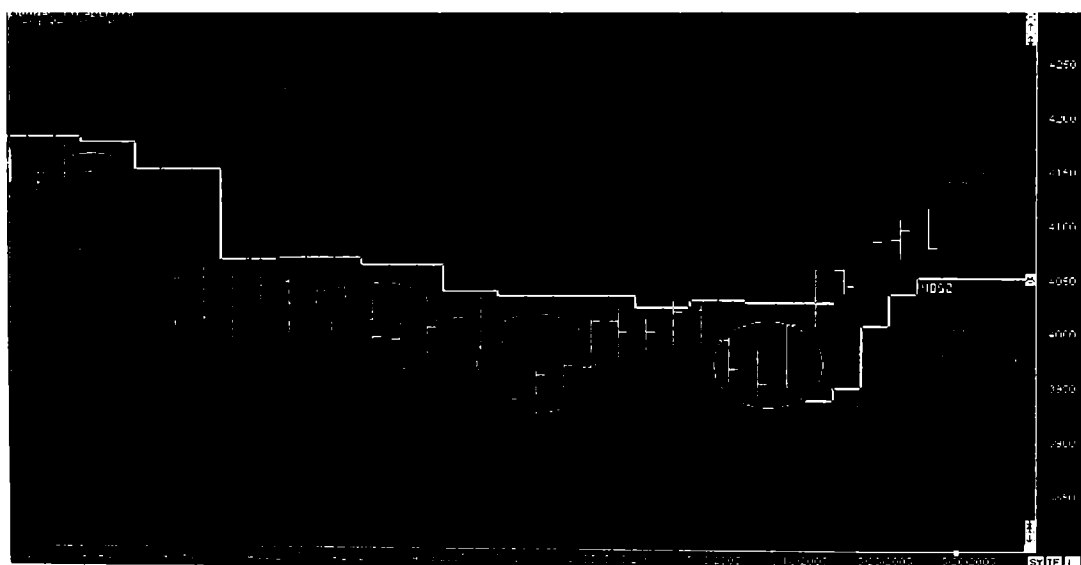


Figure 130.

In Figure 130 I've circled 4 more instances of the break, on two occasions we have price continuing lower and two other occasions of price opening inside the channel the following day and the market rotating towards the central zones. Taking it in context of the current market structure you will notice that price action is occurring in May 2005 around the Quarterly 50% level of 3961, a major support zone. Even though the channels define the Risk these channels are still part of the bigger picture and the higher timeframes will still determine the price action.

I want to take this concept even further and define the Risk of the current day within the 5-day structure, so when we trade each day we would use the same theory and trade 'breakouts' and 'rotation'. This type of trading only suits the short-term intra-day derivatives trader and still operates under the AMT model and Optimum Range.

As Day traders we are faced with what action we will take each and every day especially if you are a discretionary trader. I say this because, the multitude of traders dismally fail when developing systems that provide the positive expectancy of dollar reward when trading derivatives that most want and need to operate under if they want to make a living trading on a daily basis. Even though all traders operate under the random outcome and random distribution of wins, the job of this chapter is to increase the distribution to favour the trader by making them far more systematic in nature. As important as it is to be subjecting yourself to the market on a daily basis it is also important to wait until the Risk is clearly defined. These SD channels will define the Risk component even though price action still remains random, random in direction and random in length.

Let's Begin...

To begin with we can only have a minimum 2-day SD channel because you can't have a standard deviation of 1 period, the use of the daily pivot is our 1 period reference however at this stage we are only concentrating on the SD channels. The 2-day regressive channel is the main component of this trading technique developed by myself, and the close of the trading day sets up our first channel. We use the SD channel to define Risk, because we want to trade the market, whether rotating within the channel or the 'breakout' within the daily structure. We use the 3-day cycle when defining the trend, however we use 3 different SD channels to define Risk of the trading day because each will play a role a defining role within the 3-day cycle. You might not even want to trade using Range Bars and continue with what you already know because the levels will be generic for everyone and will clearly define Risk not matter who you are and how you trade.

Whenever the market opens each day it will open somewhere in relation to the past 5-days of trading, it will either open near the 5-day highs or above it, near the 5-day lows or below it, or somewhere in the middle of the range. It's our job to identify the risk within those 3 areas and trade it with the expectation of the market moving in the optimum range of 27 points.

Firstly let's look at the market opening near the center of the 5-day range. When it opens near the center of the range it can still go either way, move up towards the extreme of the range or back down towards the 5-day lows. The best way of determining the direction of the day is by using the standard deviation of the **past 2 days and the 'close'**. The standard deviation of the channels is set at a ratio of 2, and this is generic on all the 3 channels I will be discussing within this chapter.

Figure 131 is the price action of the SPI in the daily session; we use the day session only because as day traders we are trading the open. The chart on the left shows the price action of the market and we can make a conclusion that price is in a downtrend.

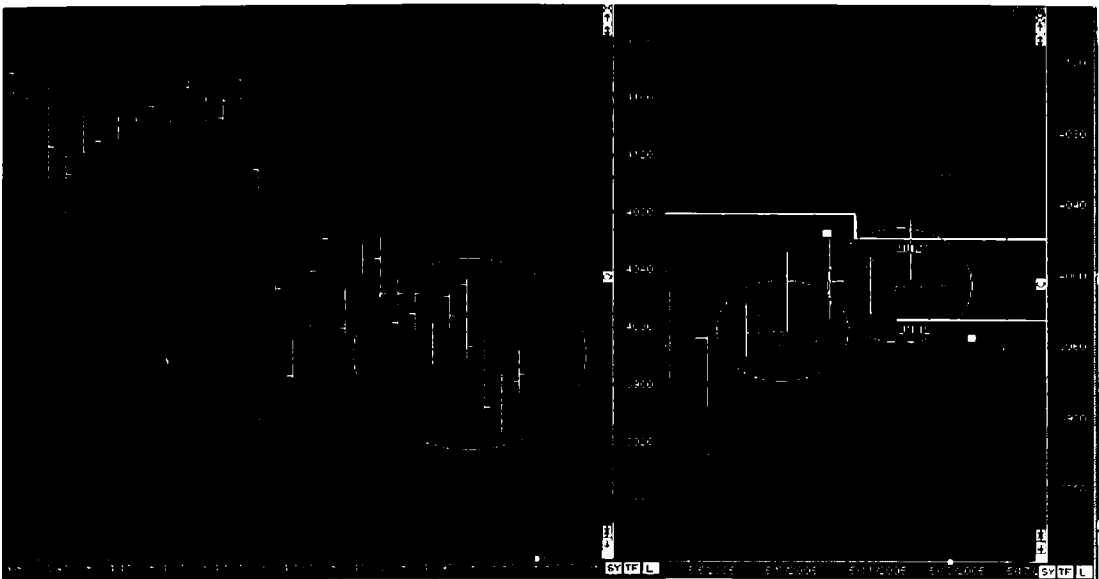


Figure 131.

The chart on the right shows the exact same bar action but this time I have used the SD of the past 2-days. we can see that once the channels regress together we have a breakout. on both occasions of the channels regressing there is a move to the upside as it breaks above the channel. Risk is clearly defined. Even on both days before the break upwards we can see the top of the channel providing the resistance for the day. we can simple use the R9 reversal to trade the rotation with the market on any failure from the extremes within this 2-day SD channel. As you can see it is a powerful tool that alerts us that we have the opportunity to trade in a systematic fashion. whether trading the potential of the breakout and a trending day or the rotation within the channel.

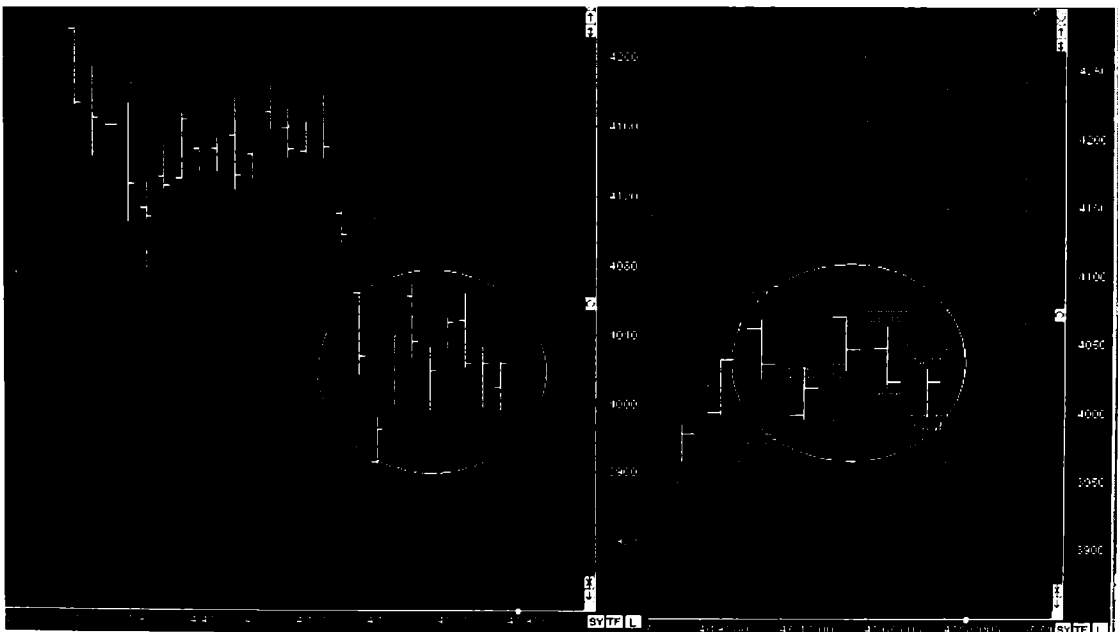


Figure 132.

The same applies when trading a gap outside the channels; the extreme of the range can form resistance, so trading the 'reversals', the outside channel would be used to define Risk of Price stalling. Inside we trade the rotation within the 5-day range, outside the channel the extremes can either be used as support or resistance for that day only.

We move from the 'closing' period of the 2-day SD channels and now introduce the same channel except we now calculate the SD of the **highs of the past 2-days**. So we take the SD of the past 2-days and only use the high period. The high period once again defines the trend; a Gap open outside the high of the range and shorting the market is risky no matter whether there is a R9 bar reversal. The only time we short the market from the extreme is if price moves back inside the channel high. We then use the channel high as resistance. The model of expectation is that there is a high probability of a 'fake' break occurring, and this will normally happen in the first hour of the trading day when the market rallies and then reverses back inside the channel.

Figure 133 again shows the same price action as Figure 132, the chart on the left shows the 2-day SD channels based on the close, and the chart on the right shows the 2-day SD channels calculated using the high zones (yellow), and also shows the 3<sup>rd</sup> channel we use, the **2-day SD channel using the lows (red)**.

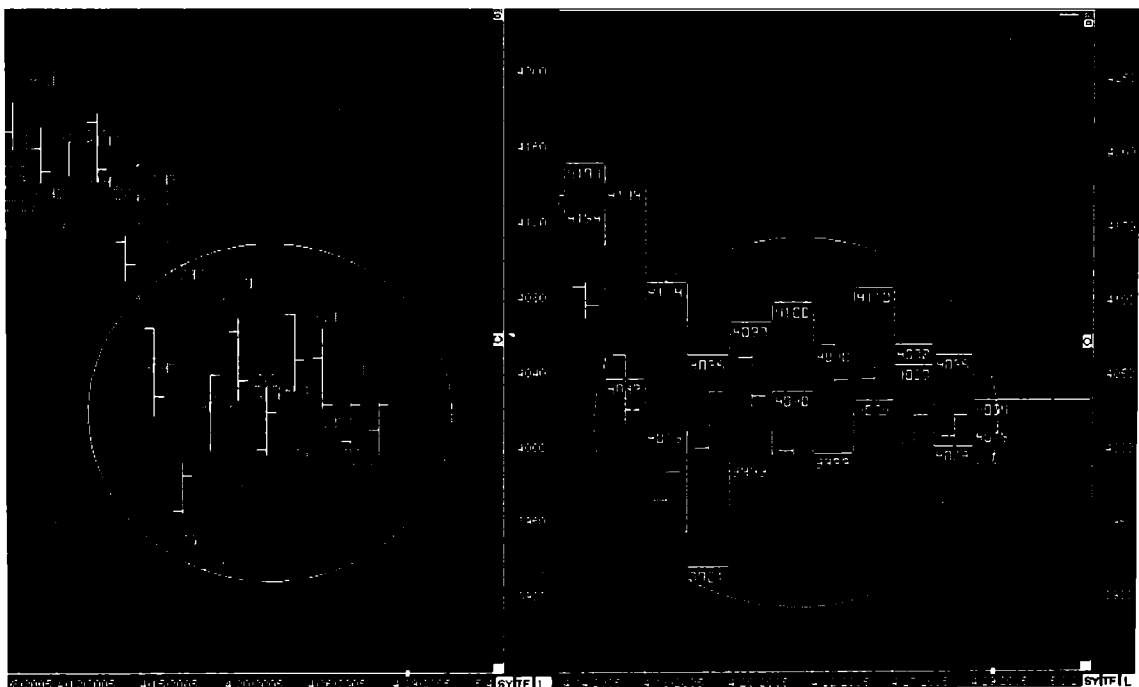


Figure 133.

You will notice that each high and each low in the chart on the left was actually defined by the two other 2-day SD channels based on using the highs and lows of the past 2 days of trading.

So what does this tell us? It tells us the even though we have a model of expectation of price moving 27 points in the day, the channels will define whether this is a possibility. If the 2-day low channel has a high at a certain level then there is a distinct possibility that the 27 points will not be reached, and if there is a 9 bar reversal after reaching the extreme then the market can reverse and move in the opposite direction of the current daily trend.

And when we look at the next chart (figure 134) we are using the same channels as Figure 131. The thing you notice this time is, whenever the 2-day SD channel comes together (purple) and price rallies as shown in the left, the right chart illustrates that price has actually moved higher than the two 2-day SD channel highs (yellow) the upper ratio that defines our Risk parameters.



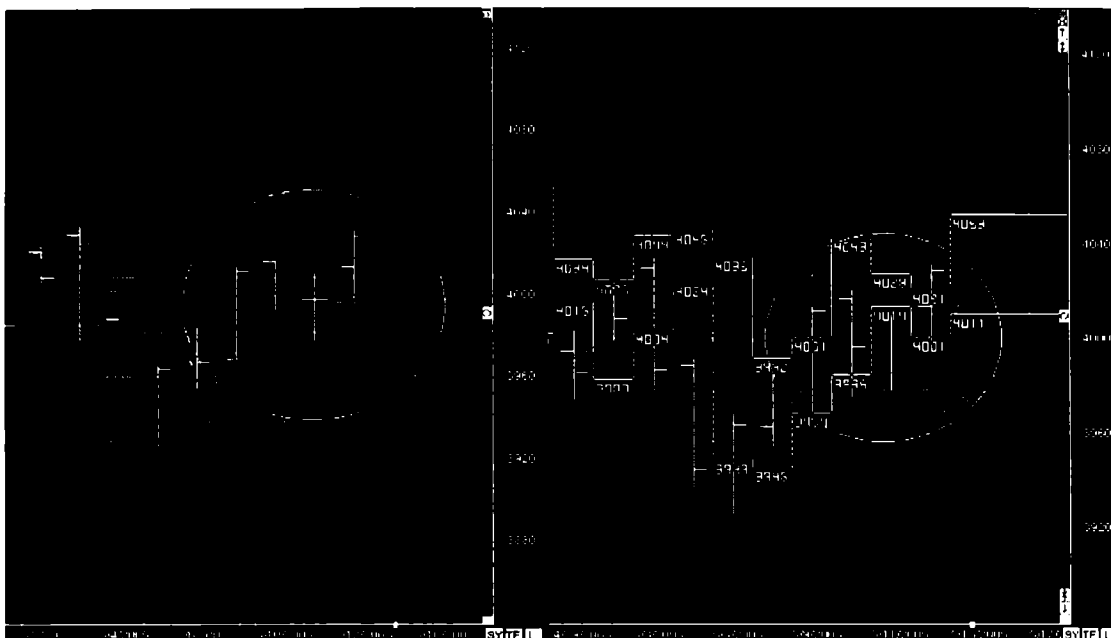


Figure 134

So what conclusion do we make of this? The only conclusion we make is the same conclusion we make throughout the book, that everything has a random outcome. We only trade when the variables are aligned and then confirmed using individual rules. My rule is to wait for at least a 9 bar reversal and then use the channel high as a stop when trading any reversals. The same applies when defining Risk, outside any of the channels and the Risk is clearly defined.

Figure 135 shows the daily SPI chart on the left, and we can see the market breaking the 3-day cycles on two occasions but reversing, there are two continuous 'fake' breaks of the 3-day cycle enough to frustrate any trader who wants to capture the trend and trade over a longer period. Even though this type of trading is directed at intra-day traders, the same SD channels will still give the position trader an added advantage.

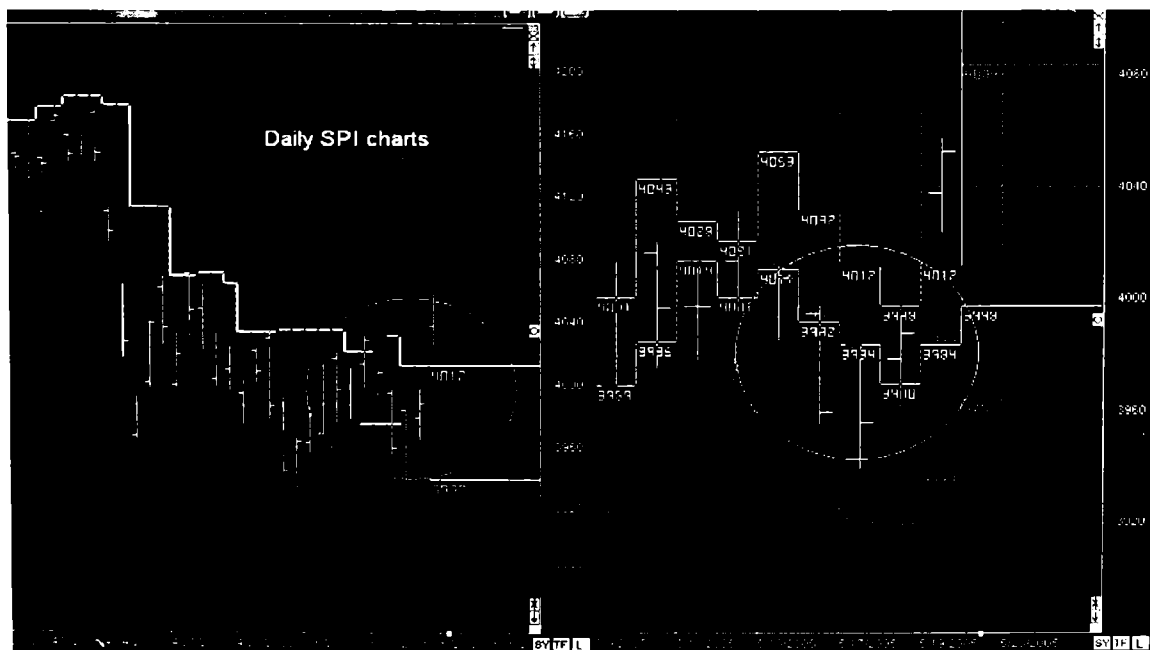


Figure 135

However when you look at the chart on the right (figure 135) we can see how the channels clearly define the daily probability of the market moving in a certain direction for the current day. Inside the 2-day channels lows and the high (Red) is a resistance zone, we use the 2-day high low channel (yellow) as a guide and trade the optimum range. Why? Because we have resistance on the 2-day low high (red) but it breaks outside the 2-day high low channel (yellow). We have rotation within one channel but it has broken out in the other and it's not until the 2-day low high (red) is below the open that the market rallies days later. The exact opposite occurs and price can move higher, we then use the 2-day high channel low (yellow) as support and trade towards the channel high (yellow) or the 27 points based on the optimum range, as seen on the second last day. The next day it opens above the break and continues to move higher.

The channels define Risk clearly, inside and rotation takes place, outside the channels and a trending day is the probability of the optimum range for the day we are trading. Each SD channel ratio will play a role in the market even though we all have the same belief that the outcome is still random. However it allows each and everyone of us the ability to discretionally define the Risk and trading potential for the trading day based on the standard deviation of the past 2 days within the 5-day range.

## **Range bars and Standard Deviation channels:**

This chapter has taken over a year to complete because I needed to back-test it, observe it and then trade it for over 6 months before releasing it. Everything in this book is the same; unless it works in a 'live' trading environment over an extended period and successfully I will not release it. Everything you read in this book is used successfully in a live trading environment, so I'm confident that once you complete this book it will hopefully be used by you successfully as long as you understand that this game is a numbers game and operates under the random distribution of wins that will have a random outcome.

Using the SD channels on a Range bar chart compared with the conventional bar chart can differ the end result, the reason being is that, one is based on the end of the Timeframe whilst the Range bar won't acknowledge this until the bar completes in the next day. Because of this the ratios and levels will differ. I want to examine this further, because when running a normal chart with SD channels alongside the Range Bar chart the same channels will differ, and in fact the Range Bar might gives us an advantage because of the precise movement and close of the bar in question.

Over this testing and trading period I noticed that whenever the market opened there's an initial movement in price between 11-13 points, once this has occurred it can only do two things, continue with the trend or reverse and move in the opposite direction. If it does this then waiting for the initial 11-13 point in the day would be something to consider instead of trading the opening bell as many discretionary traders do. Once this movement occurs then we would see if there's an actual break of any SD channel, if that's the case then the Range bar close over the extreme of the channel or back inside the channel would be the trigger, in fact price can retest the channel ratio before continuing, so the channel ratio ends up being our entry price. This only happens when there is a break of the channel. The rotation of price or failure at the channel extreme and we would wait for the R9 reversal as an entry.

I will explain this further...

We continue with the current price action and in Figure 136 I've circled in the left chart three occasions of the 2-day SD channel 'close' (purple) regressing together. Just by looking at the last circle we would already have an expectation that the following day if it opens above the channel high will have a bias on the upside. We have clearly defined Risk, and that is the only expectation we would have without question.

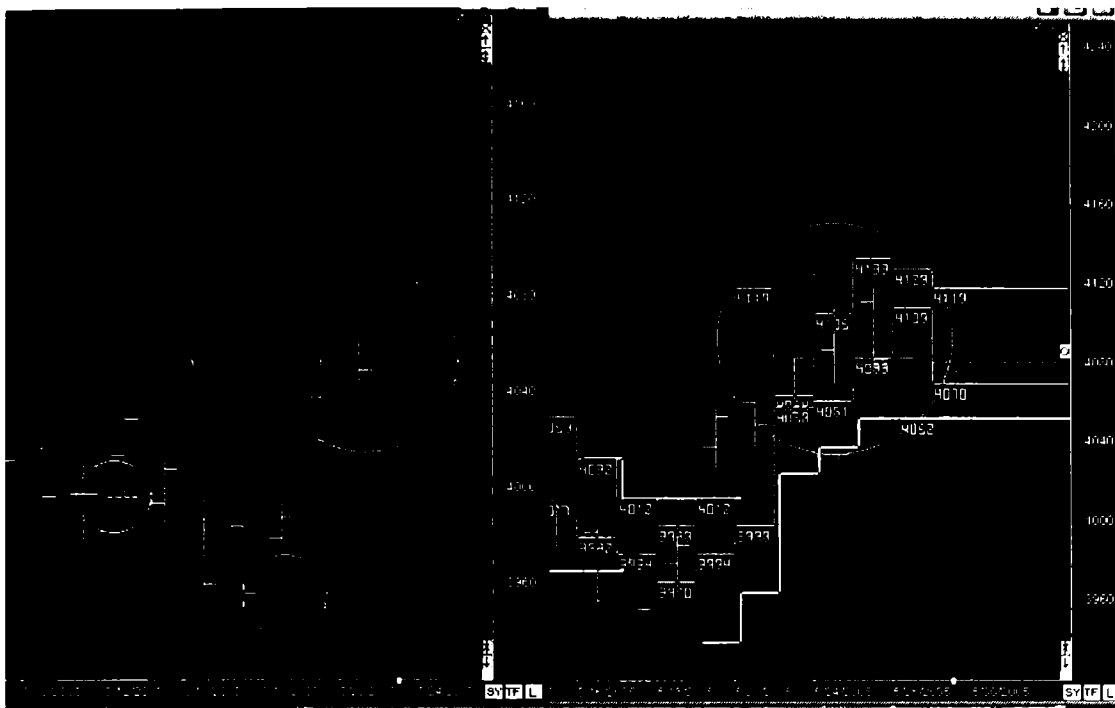


Figure 136.

The chart on the right shows price moving higher and then failing at the new 2-day high SD channel (4105) rotating back towards the lows, and at the same time the highs of the 2-day low SD channel (4083), and the market continues the next day following a similar path using the SD channels. The importance of these channels are that they clearly define how much range the day might have, if the range of a certain channel is only 19 points for example then it might only travel 19 points for the trading day so our expectation of the market moving 27 points could no eventuate.

However, no matter what the channels are saying, the market structure is still governed by the higher timeframes, and if we have a model of expectation that price is moving towards the 3-year dynamic highs of 4467, then we should only use SD channels to trade with the trend and manage any of our positions using these SD channels. When we fast-forward the market 3 months in advance, because the market does have a tendency to move in 3 month 'waves' we can see what has occurred.

Figure 137 illustrates the movement of the rally from May 2005 towards the July highs of 4332, the failure, reversal and back towards the 3-month 50% level before the market continues higher into the 3-year highs of 4467. In fact the market moved higher to the extremes of the 3-Quarterly highs of 4513 where price stalled for over 4 weeks at this level. Something I had already forecast at the beginning of the year and traded it precisely to that level using the 3-month cycles within the market.

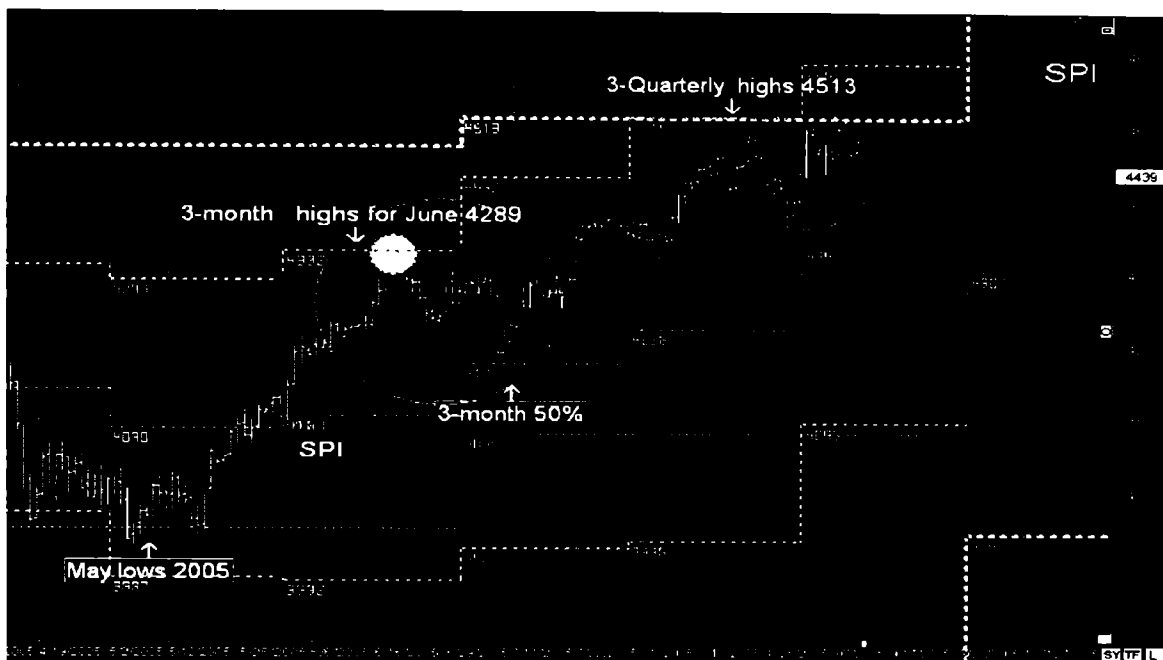


Figure 137.

As 'two-type' traders we still continue to trade the S&P as short-term traders and subject ourselves daily, however as leverage position traders on equities we need to have an understanding that we are now at an extreme range within the market structure and I would recommend that being August and coming into the weaker cycles within the primary trend of October we exit all leverage stocks and go 'CASH'.

Our focus then would be to wait until the Quarter ends calculate the new 50% level and wait until the 3-month or 3-quarterly 50% level is reached and then use the 3-day cycles to manage the market and look for any up move in the following month, that being November. We can see the exact same thing occur in May, once back above the 50% level of the 3-months our focus is to trade to the extreme. If there is going to be any Christmas rally then that exact same variables needs to be watched for.

**It is the passage of time that governs the market; it is only parameter that can allow for us to make a 'calculated expectations' in advance.** If price isn't able to move above the 3-month 50% level then we wait until the variables are aligned because price can actually move towards the new 50% level of the yearly timeframe in 2006, and that is much lower.

Don't be concerned about being 'cash'; because the S&P or any index derivative will hopefully provide enough trading opportunities of subjecting yourself daily. And the same parameters and re-occurring price action will always occur, and once it occurs we systematically trade, whether that is as an intra-day derivative trader or entering positions as a leverage trader on stocks over the longer-term.

I now want go back and have a look at the range bar chart and I use the range of 12 to trade. I have extensively tested all ranges using the SD channels, and the R12 is the one that clearly defines the movement of any break or fake break that confirms our entry and identifies the Risk in the market

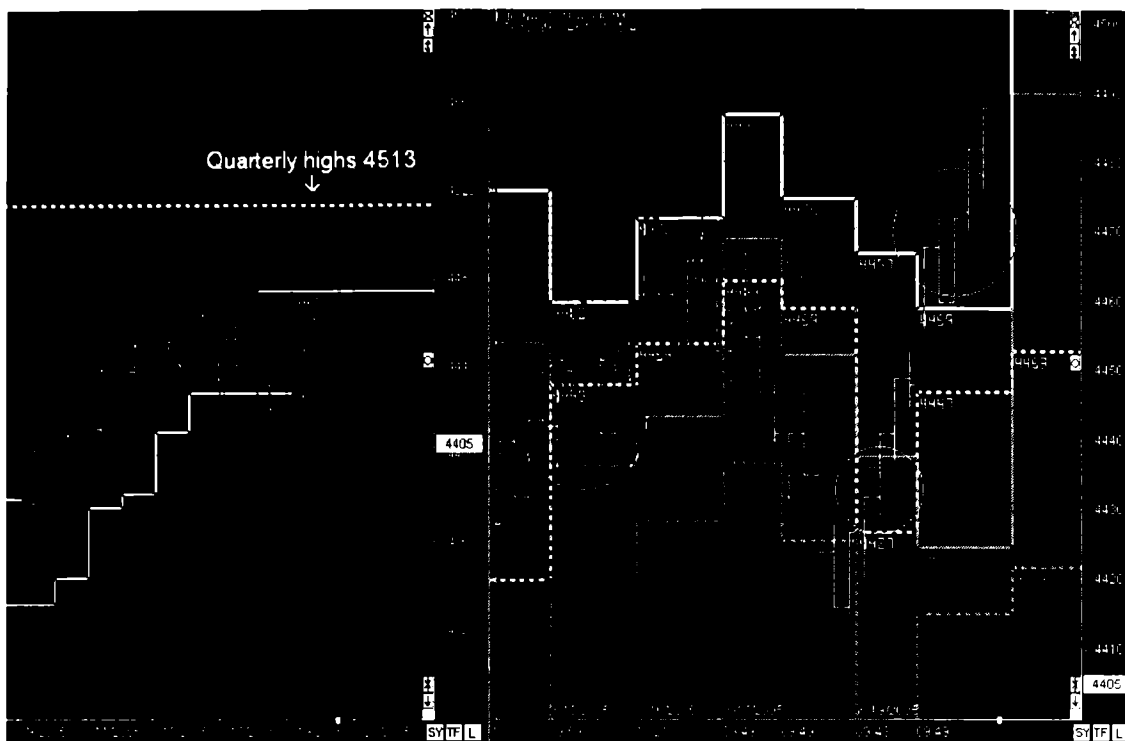


Figure 138.

Figure 138 shows the market at all time highs trading around the 3-period Yearly dynamic highs of 4467. We can see in the chart on the right the Range 12 bar chart.

Each high in the market was capped at the 2-day SD high and when there is a reversal from the extreme we would normally see a double R12 in the opposite direction.

So as traders I would wait until the R9 reverses because at least I have an expectation that price will fall another 3 points to complete the R12 but I also have an expectation that a 2<sup>nd</sup> range of 12 will complete. That's me, I prefer to wait until the variables, however someone else might want to trade at the exact level and manage the trade using the R12 close 'outside' the range as a stop or reverse, as I will explain.

In the same chart we can see it is not until price moves back inside the 2-day channel 4459 (red) and trading below the 2-day channel high low (4463) that price falls, and when we look at the 3-day cycle it actually closes below and swing the cycle to a 'Sell'.

Looking at the current market structure and at all time highs it would look bearish. It is only bearish if the following day breaks the 5-day dynamic lows, because there is still that an expectation that price can still swing and stall for 2-days.

When we look at the R12 once again the first 12-bar move for the day is UP, so I as a trader would need to see the Red channel high of 4437 fail drop down 9 points to re-enter any shorts. someone else might want to Short at 4437 at the exact high, however the R12 closes the 2<sup>nd</sup> bar above at 4441, it moves back to 4437 (channel support) and then rallies up another R12 up.

I, as a trader would then enter the break at 4438 (1 tick above) because the 2<sup>nd</sup> bar would need to move 12 points up, I basically have a 'risk free trade of 11 points, exit half and leave rest into close or the 2<sup>nd</sup> 12 point range.

The other trader who shorted at 4437, would place their stops at the exact completion of the R12, so they would be stopped out at 4 points, however they would then reverse the trade and re-enter longs for the R12 completion.

We have a minimum move as a target, and then manage the trade by exiting half contracts, run breakeven stops at entry level and let the rest run to the close of the day. In this instance we need to acknowledge that we are trading against the 3-day cycle so we manage it as per the cycles, however if the same price action occurred in a BUY 'cycle', then traders can trade it into the close, whilst position traders would leave positions open with the expectation of price continuing with the trend.

We can then see in the final day an open above the 2-day High (4459), the initial move was 12 points up and unless price moves back inside the channel high, shorting the market is open to Risk, whilst position traders would be more than happy to hold their longs once again.

### **In conclusion:**

Traders need to have an expectation of price moving in waves of time over the higher timeframes and we need to acknowledge that whilst price is over the 50% of the timeframe in question the trend remains strong and visa-versa. The cycle is clearly defined using the 3-period cycles and it's also the first confirming tool that the change of trend has occurred. As price nears the extreme of the dynamic higher timeframe, the Risk is clearly defined because there is an expectation of a 'reverse' occurring, however the expectation of this happening is always a random outcome, that is why confirming the expectation is a must using the 3-day cycles. A break of the timeframe extreme and there is an expectation of the trend continuing for the timeframe in question and into the new timeframe. **This is how I define a breakout, it's not a break above a higher high or a lower low, it has to break and close outside the dynamic timeframe in question. This is the only time a breakout is truly confirmed.**

As 'two-type' traders we simply manage the market using what is in the book, if the same patterns continually occur then we should not have any fear we are missing out on anything because we are covering our bases. Let me explain... I have made the point that at the 3-year dynamic extreme of 4467 I have gone 'Cash' on my leverage stocks, I'm not concerned of the market going higher, because in the future I have the expectation of price reverting back towards the mean or the higher-timeframe central points. I'm not concerned with what Price I pay for anything because I understand that each move has an expectation to follow the market based on the AMT dynamic model. If price is below the 50% levels of the higher-timeframes then we wait until price moves back above the higher-timeframe 50% levels. The price action in May 2005 is a perfect example of this.

Let's look at what has happened since the market rose and reached our multi-year high target of 4467 that we forecasted at the end of 2004. We can see in figure 139 that once again on the day the future contract expires, price breaks the high and closes above, and then for the rest of the Quarter (2-weeks) the market rallies another 200 points to 4700. Anyone who sold their shares would have exited all their positions over 200 points lower and would probably be kicking themselves'. As an AMT-trader we simply calculate the new 50% level of the past 3-months and the 50% level for the new 3-period Quarterly range. We can see that level at the start of October is 4421.

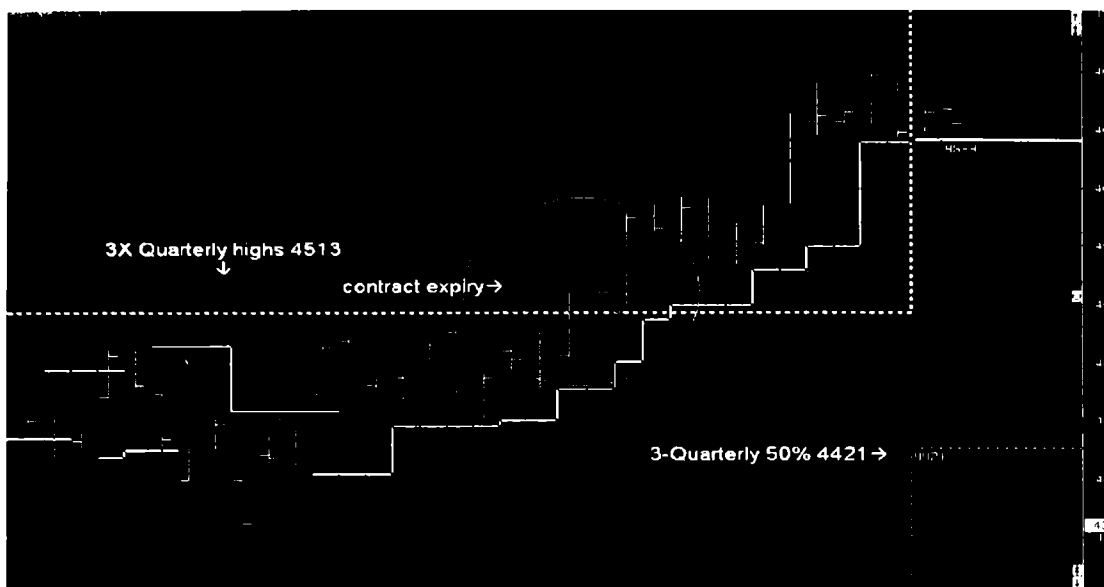


Figure 139.

Just like in May 2005 we would like to see price pull back to this level, watch it consolidate around this level for a number of weeks and then see if there is a move back above the 3-month 50% level in November. We would like to see the exact same price action now as 6 months ago, and maybe the price action on the DOW would give us another lead just like before. If it doesn't move back above the new 3-month 50% level then we simply wait and remain in 'cash positions' until the variables are aligned. Another trader shorting the market would use the exact same information but in reverse. The information is generic for all, however it's up to the individual to trade according to our own rules.

As a Short-term derivatives trader nothing changes, we simple subject ourselves daily to what I've already spoken about in this book, because you will see the exact same price action occurring, and if that's the case we trade with the same expectation.

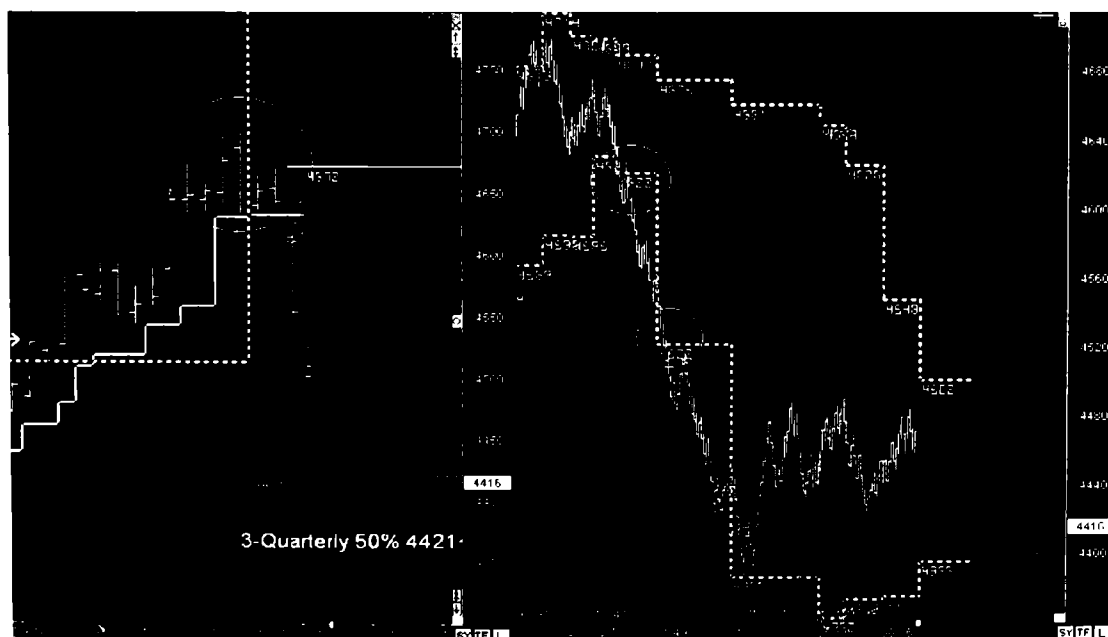


Figure 140.

Figure 140 shows the 3-day lows breaking not long after the start of the new Quarter, and in the space of three days the market has fallen nearly 300 points back to 4421, and when we look at the chart on the right each day the market opened, price opened outside the 5-day dynamic range, and we all know that once price is outside the dynamic range there is an expectation of price remaining outside the range until the next timeframe. If price keeps opening outside the range, then price will continue to fall, we have seen this already occur on three different occasions this year. The low was the exact same as the 5-day dynamic low extension (4386), and once back inside the channel we would have an expectation that price will once again rotate upwards.

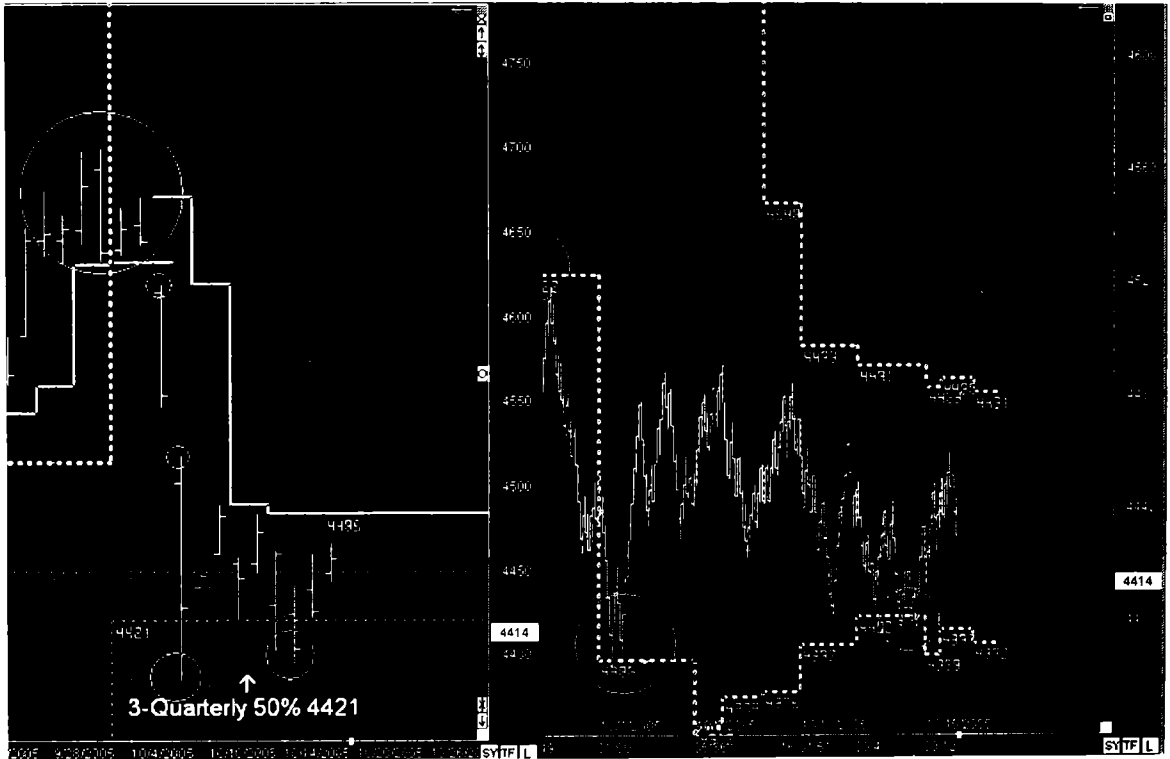


Figure 141

We are now back at the dynamic entry level for 'leverage' on equities (4421), however we still need to see price distribute around this level for a number of weeks before we re-enter on leverage positions with confirming price action. Everything in the AMT model has an expectation, we can make highly accurate and precise forecasts in advance, but we still need to see the confirming variables to trade and manage those trades.

Figure 141 illustrates the distribution around 4421, the trend remains defined by the 3-period cycle (sell) and we can see that there is another bounce off the 5-day dynamic lows of 4402 and heads higher once again. Price is now distributing around the level we want, but in my opinion it is still too early to enter any leverage positions because Risk is or isn't clearly defined. What I mean by that is, Risk doesn't favour any upside until the variables are confirmed not matter how much consolidation is occurring around the 50% level of 4421. Whether you are trading the Long side or currently holding short positions, traders must make the same conclusion even though they are trading differently.



I now want to go back to the SD channels and short-term trading...

Through all my testing and trading I believe that the SD channels provide the perfect environment to make highly accurate expectations for trading and identifying Risk. We have clear ratios that define support/resistance and we use those ratios as we see fit.

Figure 142 shows the past two days of trading as we continue to consolidate around 4421. In the chart on the right we have the R12 bars. (12 point ranges for each bar). We can see the high of the day was the at the 2-day close high (purple 4461) and price fell back towards the 2-day high low channel (yellow 4423) where once again price rallied into the close. And on the following day we can see price opening above both channels highs (support) even though the market didn't rally up to 4479 it still provided support for the entire day.

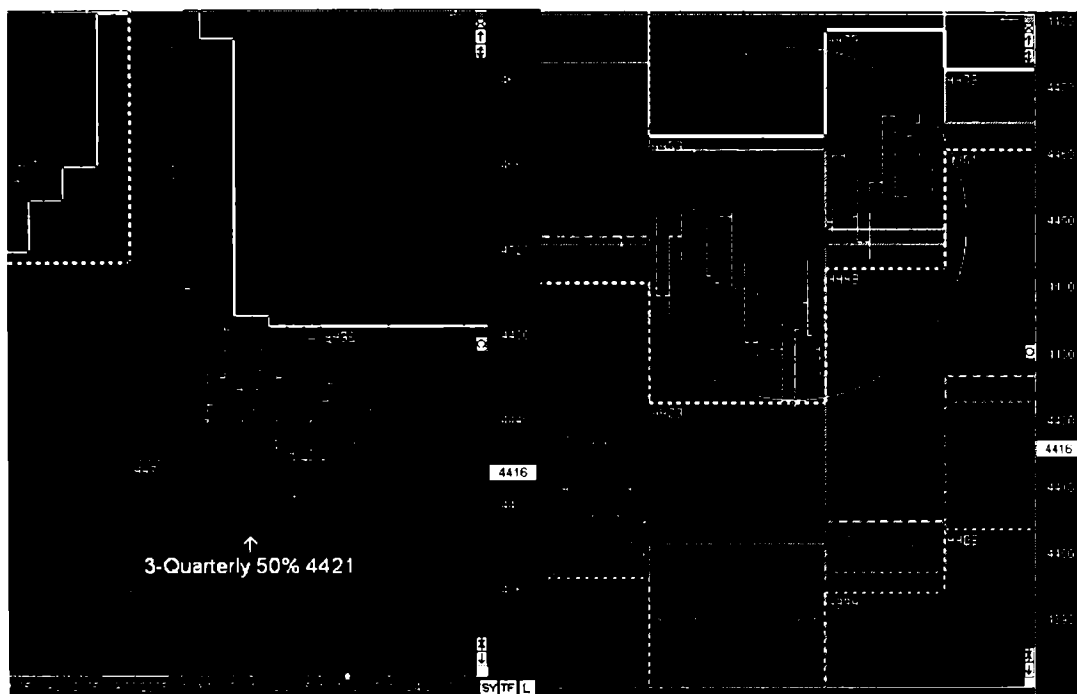


Figure 142

12-point range bars.

I want to remind you that everything still has a random outcome, I don't know whether each level will provide the resistance and support I want, and I certainly don't know how far price will travel in one direction before the market reverses, however one thing I do have is, I have an expectancy through all my systems testing that there will be a 2<sup>nd</sup> range 9 bar occurring with high regularity.

When we look at both those days, the first day had thirteen R9 reversals, of those ten completed the 2<sup>nd</sup> bar in the same direction, the next day there was only seven r9 reversals and six completed in the same direction.

What that says is, if you are looking for confirmation within the market structure, wait until the R9 reversal occurs, and if holding 'positions' it actually can become a trailing stop because of the expectancy of the market continuing further after the initial reversal. Someone else might just systematically trade every r9 reversal within the day. Remember the 2<sup>nd</sup> bar always has a random

return because the 2<sup>nd</sup> range of doesn't always move 9 points as previously described. Of course we expand the return with expectation that a double R12 will complete in the same direction.

*So what happened next?*

The next day the market opens below the SD channels (4427), rallies up, stalls and then reverses down into the 5-day dynamic lows of 4403. These 5-day lows have often provided support and resistance in the past, so we would have the same expectation that it will do the same.

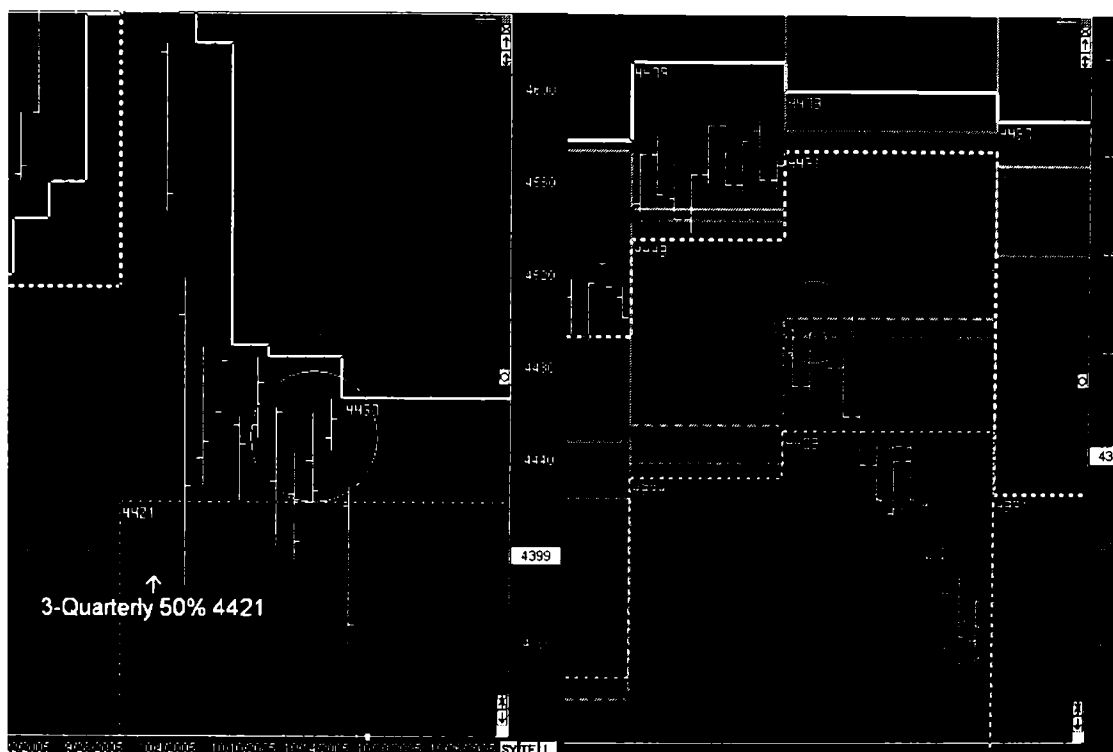


Figure 143

**12-point range bars.**

However, the first time we have any R9 reversal in the market actually occurs below the 5-day lows of 4403, there wasn't any 9-point reversal off the 5-day dynamic lows. Below 4403 we once again have a swing upwards before it reverses again, this is now occurring outside the range, we have a 2<sup>nd</sup> breakout and should trade it using the R9 reversals to the downside. There wasn't any other reversal until 40-points lower and the close of the day. (*The SDC for today was an N set-up*)

On this day the market fell more than 80 points, who would have thought, but nevertheless we have clearly identified 'Risk', and then simply traded and managed the price action using the AMT model that operates under the 'statistical expectancy' of re-occurring price action within the market structure; **the SD channels, the 3-day cycles, the dynamic ranges and the movement of the Range bars.**

## Cycle Traders:

As 'leverage' traders we are still trading the market regardless using short-term trading techniques in derivatives, however as medium term cycle traders we are still waiting for the AMT variables too align for us re-enter the market 100% invested.

And what are those variables?

It's the same variables highlighted throughout this book, the weekly close back above the 3-month 50% level, and our target will remain the 3-month dynamic highs or preferably hold until the 3-period Quarterly dynamic extremes.

We need to wait until this happens to be 100% invested, but again there is nothing wrong with investing a smaller % of buying at the 3-month dynamic lows.

The DOW and most other markets will follow a very similar path.

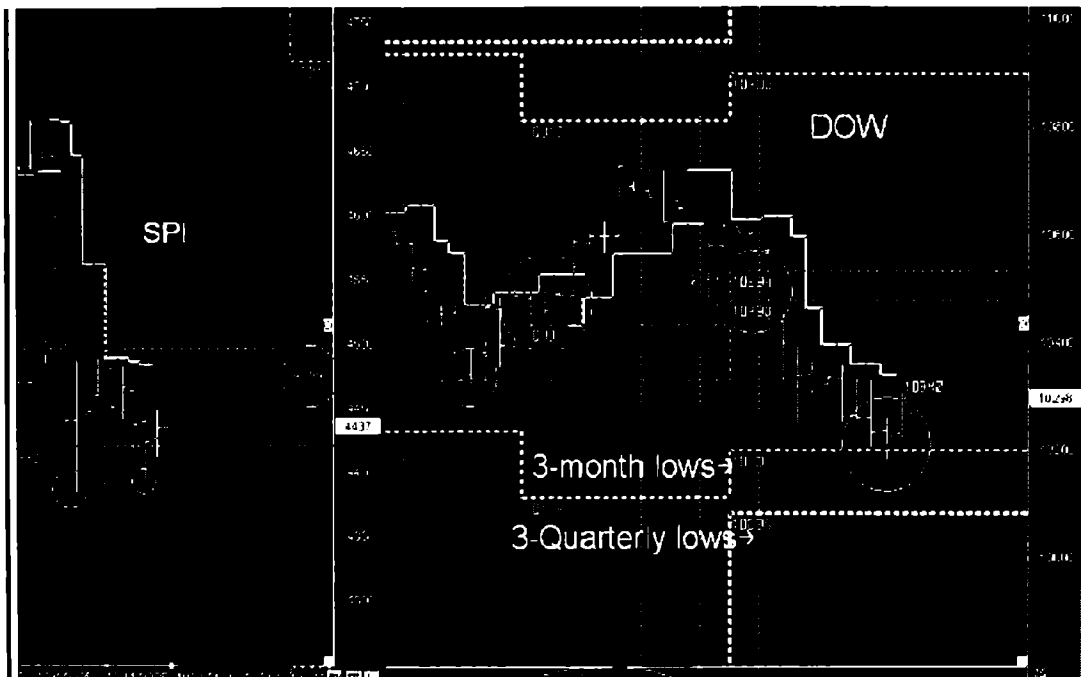


Figure 144.

We can see the SPI on the left and the DOW on the Right, the DOW is bouncing off the 3-month October 2005 lows, traders could enter a % leverage position once it breaks and closes above the 3-day highs, and then enter a 100% position once it closes on the weekly timeframe above the 3-month 50% level.

The SPI is exactly the same, we as traders have an expectation that Risk is defined around the 3-month dynamic lows, we can trade the same way as the market breaks the 3-day highs, but only invest 100% once the weekly range closes above the 3-month 50% level. Normally that would be in the preceding month, in this instance November

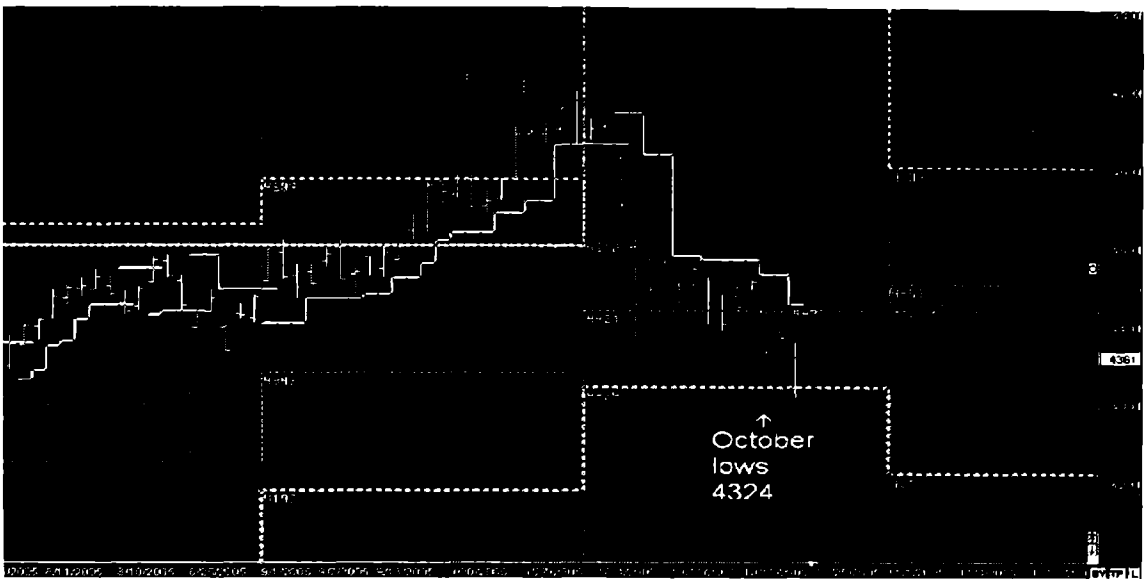


Figure 145.

In this instance we can see that 50% level has dynamically shifted lower in November to 4456, but will only be confirmed on the close of the month of October.

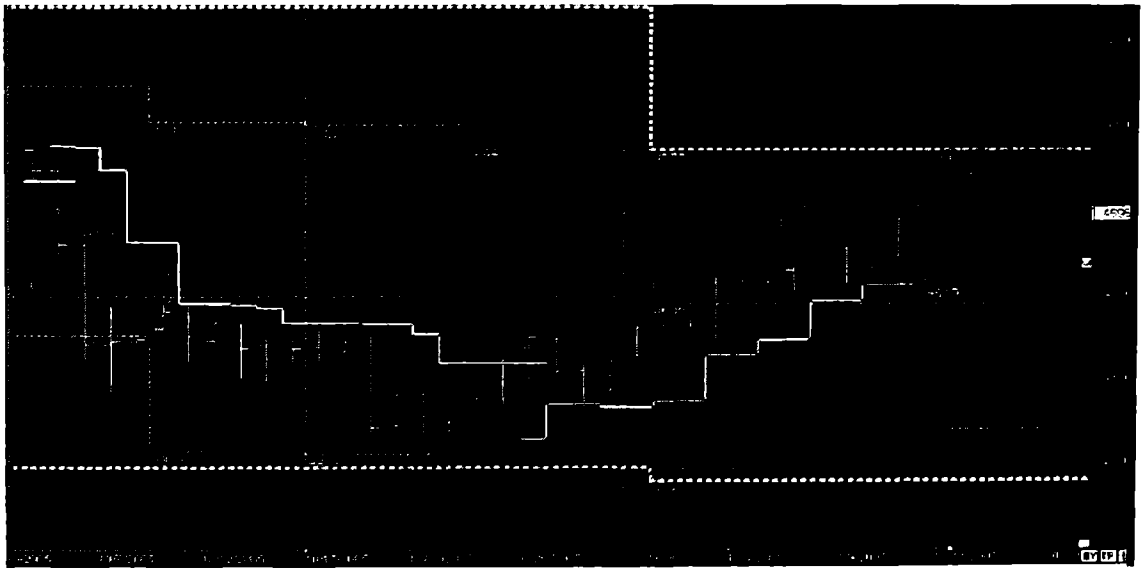


Figure 146

And we can see the 3-day high break, swing back into the 3-day lows, and then close back above the November 3-month 50% level where we go 100% invested on stocks once again.

We have our target, the November 3-month highs, and we can once again see the market follow the smaller 3 week time cycles as it moves towards the higher 3-month time cycles.

Traders can sit back and let the market unfold into the close of the trading month and probably into the end of 2006.

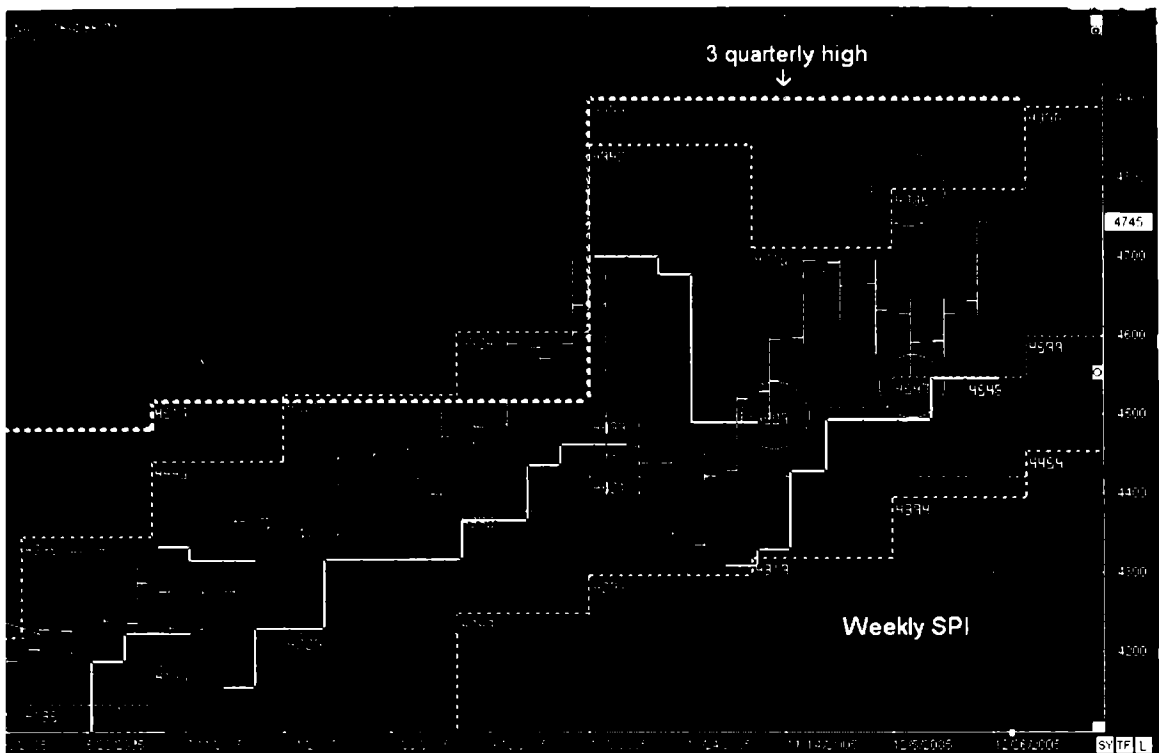


Figure 147.

And if you follow my articles within the datafeeds forum, you can see my advanced calls about how to best trade the market. Because back in October we were waiting for the right variables to move back into 100% invested on stocks after being nearly 3 months on the sidelines in Cash.

When we re-entered 100% leverage we were basically getting back into the market not far where we exited 100% months earlier at 4467, at the 3-year dynamic highs.

And when we look at the weekly chart (figure 147), we can see the break and close back above the 3-week period cycles that coincides with the 3-month 50% level, then move into the November 3-month dynamic highs and Market Risk, swing back lower into the December 50% level of 4547, and then once again head higher towards the new December dynamic highs, once again to new all time highs.

We can see our market moving in waves of Time based on the AMT model, cycles, and multiple higher timeframes.

## Final Words:

Someone recently asked me this....

*"Frank,*

*Notwithstanding all the valid points that have been said, I've notice "price" is still required to calculate "time" (in the context of trading). All the time frames, time zones, cycles, whatever, have no relevance without price...historical price at that.*

*But I still don't get the "time is 'MORE' important than price. Can we trade time alone? No! But it is possible to trade price alone. (Range bars etc)"*

My answer is no, because range bars don't have any expectancy unless defined by some 'time' variable especially when used in conjunction with pure mechanical systems.

Time shifts the variables so there is a greater expectancy at a certain 'price' within this timeframe. Once this timeframe ends and the market dynamics shift, the same Range bar price action will not provide the same expectancy.

A range bar reversal under 4423-27 today as per my Risk levels will not necessarily provide the same expectancy tomorrow because these levels have shifted completely tomorrow. So Time shifts the market, 4423-27 just becomes a 'price' because there is no statistical observed pattern occurring here tomorrow whether trading discretionally for a double directional move, and probably won't be triggering any systems either.

If you subscribe to Risk/reward strategies with an expectant outcome, then the variable of Time is more important, we then trade price. Because this will give you a greater edge than trading price alone.

**Lastly,**

I'm excited of finally bring this information to the readers of **Analytical Market trading 'a window into the future'**. I must stress that this information is copyrighted and not to be passed around or reproduced without the consent of the author. I spent many months and years documenting and studying this phenomenon within the market structure that I hope that others would respect the amount of work that has gone into this and everything else that is within the book.

*...“My job is to put you in all three. The long-term investor, the medium term cycle trader and lastly the one that is most desirable and glamorous, the intra-day leverage trader”*

The Last chapter now reveals the 'third trader'. I began with this book with the goal of helping you become a three-way trader. So far I have concentrated solely on the two-types, and now my goal is to make you the third. I would have to say that the next chapter is probably the most important chapter within the book.

# Chapter 11

## Compounding, Invest for Financial Freedom.

One of the most amazing principles that any person can apply is the power of Compounding. When Einstein spoke about all the amazing principles that existed in the universe he spoke about the principle of compounding, and any man that was able to comprehend and apply this, the returns would be astounding.

Here is a chance that any person can start out with nothing and become wealthy, by not being Rupert Murdoch but investing in Rupert Murdoch. Compounding is investing, and investing in the talents of others even with tiny amounts of money your wealth can grow beyond your wildest imagination.

Compounding in a nutshell is money that is not spent but continuously reinvested over a number of years, and even though the returns in the early years might not be great it will eventually have explosive returns beyond your dreams.

Before I continue with this chapter I want to let you know that I'm not a financial adviser. I am a trader and I am an investor. This chapter has basic information that anyone can use and apply. For people that want to investigate and use the information that is within this chapter I recommend that you speak to a financial adviser or do the sums yourselves.

In my opinion the principles of compounding are a must for any serious trader and investor. How do you think Warren Buffet became so rich? He became the second richest person on the planet by being an investor, and not by being a short-term trader. Warren Buffet understands the effect of compounding, and understands what he is investing in. Warren Buffet knows how to value a company and then invests and reinvests into 'value' companies by asset allocation over numerous years. And an important element to his investing is, he does not sell!

If you are serious about your future and you family's future, the principles of compounding must be applied now. Compounding gives us the knowledge and the plan that we are on the path to financial wealth.

## Golf: A game of numbers.

Anyone who is reading this book I assume understands the game of Golf, and if anyone has been living under a rock, the game is about putting a tiny white ball into a hole; 18 times.

Imagine you're playing a game of golf and your partner says '*lets play each hole for fifty cents*'. Now .50cents isn't much, and how much can you lose over 18 holes? The answer would be 9 dollars. Now lets change the bet and double that amount each hole, so for each hole the amount increases by 2, so the first hole is 50 cents, the second is \$1, third hole is two dollars, fourth hole is four dollars and so on. So how much would you lose after 18 holes of golf?

Ok, lets play golf, and you better be a damn good golfer to go into a game playing with these rules.

Hole 1. 50 cents  
Hole 2. \$1  
Hole 3. \$2  
Hole 4. \$4  
Hole 5. \$8  
Hole 6. \$16  
Hole 7. \$32  
Hole 8. \$64  
Hole 9. \$128

We are now half way through our game of golf and you are have just played for \$128. If your are playing poorly you probably thinking, '*ok \$128 isn't bad at this stage and there are only 9 holes to go, so how much can I lose?*'

Hole 10. \$256  
Hole 11. \$512  
Hole 12. \$1024  
Hole 13. \$2048

You are now into your thirteenth hole and you have just played for \$2048. If you were losing at this point I'd say the wife wouldn't be too pleased hearing the news. No dinner for you!

Hole 14. \$4096  
Hole 15. \$8192  
Hole 16. \$16384

You have just lost \$16,384 on the 16<sup>th</sup> hole. I'd say that an option of not going home tonight would be something you are contemplating right this moment.

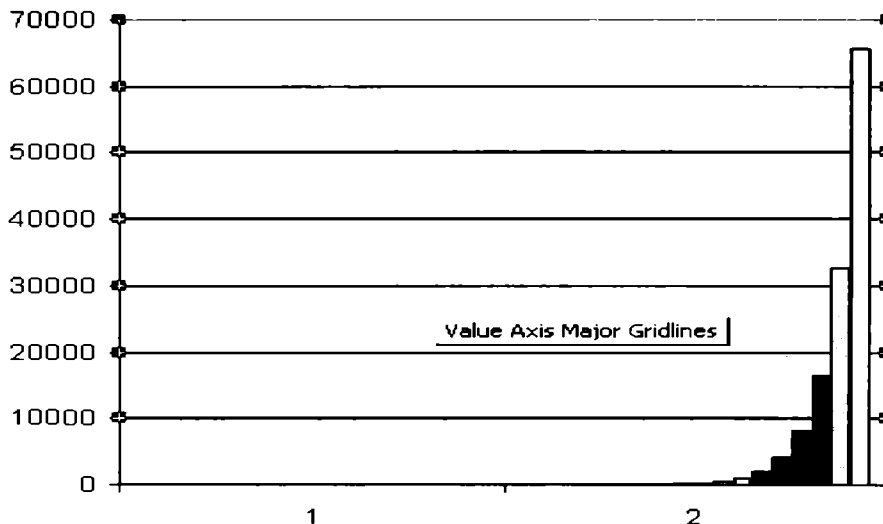


Hole 17. \$32768

Hole 18. \$65536

By the 18<sup>th</sup> hole, the fifty-cent bet has now grown to \$65,536. Divorce would be on the cards.

Seriously, this is only an example but it shows the power of compounding, and when you have a look at the accompanying graph we can see the explosion rate of return in the later stages. The chart shows the early stages of the game but it is not until 12th hole that we can see the explosion and rate of compounding return.



And this is crux of the entire principle of compounding; our ability to reinvest monies over a number of years to achieve returns beyond our wildest dreams.

The grass might grow slow for many years but you'll no doubt have a forest by time you want to enjoy your retirement.

### ***Rate of Return:***

The rate of return in the previous example is something we probably would not experience in our lifetime. I do not think it is possible to achieve those returns continuously for years on end. There will be growth spurts in our market with every bull market, and there will be periods of downtrends just as night follows day. But keep in mind; with every bear market our ability to achieve a greater rate of return is increased because we are able to buy value at cheaper prices.

Because this book is about trading, the focus on compounding is about buying shares, but the same principles apply with most other investments, for example property. My only concern at this stage with property is most buyers need to have something to be able to go into the property market, such as equity or a cash deposit. This chapter is about starting with nothing and developing an understanding of the principles of compounding so each individual can accustom their own sets of rules and achieve what they desire. Those rules will depend on the age you begin because each person needs to define risk so they can structure their rate of return by asset allocation, something Warren Buffet uses, and secondly, the rules will be determined by the income we earn, how much is each individual able to commit to achieving the principle of compounding.

For example, by saving only \$5 a day and investing this amount per month (\$150), and you were able to achieve an annual rate of return of 15% over 30 years your return would be \$1,051,000 after 30 years. Think about it, in 20 years time \$150 will not mean much but I'm sure having over a million dollars using this paltry amount isn't something you would sneeze at. If you add another 10 years, that amount would now be 4.7 million dollars. For anyone \$150 dollars isn't much and this comes down to how much money each person earns, if for example you are able to achieve the same return over 40 years with \$250 per month your return would be 7.8 million dollars.

This is serious money in anyone's language, and this is the power of compounding. For anyone wanting to start with a simple plan my suggestion would be, try and allocate 10% of your wage and apply it for a minimum of 30 to 40 years. If you can't afford 10% then I suggest find some way of earning extra money to be able to put into place an effective long-term strategy. Remember 30 and 40 years aren't a long time, life expectancy just continues expanding as time marches on. People fifty years ago expected to live between 60 and 70 years, and now late 80's and 90's seems to be common amongst women and men. By the time many of us reach retirement age it wouldn't surprise me if living beyond 100 years would be the norm.

This statistic is fascinating; the life expectancy at the start of 1900 was 47 years old in many developed countries. Today, the life expectancy of a woman is 87 years old. The life expectancy has doubled in 100 years. 8 out of 10 will live beyond 65 years old; these statistics alone confirm that all of us need to plan for the future.

The minimum require for this plan is 10% of your wage, it has to be! It must be invested, reinvested and compounded for those 30 to 40 years. This is the ticket to financial freedom and you must begin as soon as possible. I'm making another suggestion; once you complete this book start the plan immediately by determining the 10% dollar amount. This is your monthly contribution that you will use for life. It might seem a large amount today but I guaranteed in 15 years this amount will seem insignificant. I also guarantee that by the fifteenth year you will be well on your way to achieving your financial goals. Your dollar amount needs to be put aside each month or placed into a cash management account where you cannot touch it. Once you have committed yourself you can now begin and plan a financial strategy for financial freedom and wealth.

## Compounding Strategy.

The best investment traditionally and the fastest way of growing any persons critical wealth has been in the stock market. It allows us the flexibility of investing at low cost whenever we want. When we look at the stock market since 1950 in the US alone, the rate of return has compounded nearly 12%. For over 50 years through war, recession, numerous commodity fallouts, stock and currency collapses the market has still returned nearly a compounding effect of nearly 12%.

If someone invested 20,000 dollars in 1927 for 60 years in bonds that has had an annual return of 5% the dollar return would have been just over \$373,000. If that same person invested in the stock market over the same 60-year period that actually had rate of return of 9.8% her return would have been over 5.4 million dollars. Not even the crash of 1929 and every other correction in the markets had an effect. By giving examples I hope we are starting to see the painted picture and the same picture that Warren Buffet paints, we do not sell a major portion of our assets when investing.

What we do sell is determined by what portion we allocate when investing... Asset allocation is important because it allows us to be able to achieve a greater rate of return than what we would normally receive by sticking to the safe option. For example, if you are able to save \$10,000 per year to put into your compounding strategy you might want to decide that 70% be placed into a safe option whilst 30% be allocated to growth. Again this strategy will be determined by your age, if younger then maybe you can decide 60% security, 20% Growth, 20% speculative, but as we grow older the ratios need to favour the security percentages. And, always know what you are investing in, understanding the value of the company is a must.

Your individual decisions based on your knowledge of valuing companies will determine your rate of return. For example, an investment in 1974 in Wal-Mart of only \$100 has returned today nearly \$42,000. That is a lone \$100 invested without adding anything else. Now imagine what it would be if you added \$100 per month over the same period, your return would be staggering. This is about understanding the value of the company and also understanding the entire industry. Investing in banking shares is one of my favourites strategies because it provides security, growth and a steady stream of dividends that yield between 6-7% annually. Already, by simply investing your money into banking shares your are receiving a compounding return (tax excluded) on your money, but diversifying within the industry would be a sound strategy than instead of only buying a single banking company. And the same goes for your growth allocation and speculative allocation when deciding to invest, understand the index that drives the sector as seen in Chapter 7 and the financial index.

I recommend the greater portion of the plan needs to be allocated towards security and yield returns hence my favouring of 60-70% invested in banking stocks, for others they might want to invest a different ratio and a different sector to achieve their own secure long term financial plan. Ideally we want to be achieving a greater return than what the yields are giving us.

For example, if banking stocks are delivering an annual rate of return around 6% then we would ideally like to achieve a return between 5-10% more. Anything above 11% would be ideal, the more the better.

So how would we be able to achieve a greater return? Well, the stock has to rise over the years by 5-10% annually, and we all know that isn't possible year in year out, markets do correct themselves and move into 'bear' phases, so there will be years when the stock doesn't rise above the previous years highs and so on. But it's not the price action and bar chart of the stock that is our concern, it's the Price we pay that actually provides the greater rate of return above the yields. So our timing of the market is paramount. And when we go back over the years and look at the main cycles that drive the market we can see the statistical sell-offs that occur around September-October each year. By simply saving your 10% into money management account until these dates and introducing a Timing model into your plan buying regardless of price action around Mid-September or early October your ability to achieve a greater rate of return is intensified. Statistically when know the cycles around those times within the Primary cycle are one of the weakest, and so in my opinion it is actually more financially sound to be investing when the market is falling than rising.

We need to be reminded that this is a long-term financial plan to creating wealth and not a trading plan of buying and selling. We are not concerned about trying to pick the bottoms of the market we are only interested in buying value and investing with a 30-40 year timeframe. We are now investors using compounding strategies with the goal of creating financial wealth beyond our wildest imagination. Wal-Mart is a perfect example.

You can only earn so much in your job but compounding is unmatched in the areas of return. The stock market is great in achieving your goals and especially when stocks are growing. Retail stocks are a perfect example, I use the American example of Wal-Mart but we can see in Australia the likes of Harvey Norman, Woolworth, and Coles Myer for example, these stocks are part of a sector but the growth in each has been varied, so diversifying within the industry is a must. And part of our goal is to be able to achieve 5-10% above the yield return for each individual stock. A compounding return of anywhere between 11-15% over 40 years would be mind-blowing to say the least.

There are no secrets when it comes to investing, the only secret is just doing it, and along the way each of us will make mistakes, not every stock has a silver lining and a lot of stocks that were once high flyers have come unstuck and even disappeared altogether losing investors money. This is a reason why we need to have the right stock allocation or more importantly portfolio allocation. Once we determined our allocation we finally have our 10% speculative portfolio. Now this portfolio might not be everyone's ideal strategy and especially someone who is older the 10% spec rule might not even exist and they might want only to invest in stocks that are actually returning yields. Keep in mind that most speculative stocks do not return any yields so you are already losing a rate of return. This is something each individual person needs to work out for him or herself, but there have been some fantastic returns for speculative mining stocks, medical stocks and even tech stocks.

If you do decide on investing in this area, this area is the only area where we do take profits, and any profits after tax should be reinvested back into your secure and growth portfolios when we are buying around our timing model. Also, each individual might want to determine a set plan on profit taking, for example if the stock rises 100% a person might want to exit a third of their position and let the rest run and apply the same rule when it reaches 200%. Stocks can rise and have risen 1000% and at least you want to have to held part of the way. Remind yourself, we are not concerned about exiting spec holdings after our profit rules have been met because our goal is reaching an 11-15% annual compound return, and anything above this is a bonus.

(Note: Tax is an issue and this will vary depending on the individual especially when it comes to dividends and profit, and I recommend that all dividends be reinvested back into the plan. Tax on rising stock prices shouldn't be a concern because we are not selling our holdings on the bulk of our asset allocation.)

Can you imagine if you started with this plan a decade ago, or think back of when you bought stocks around that time only to sell them for a small profit, and now see them 10 years later over 500% or more. The same could happen between now and the next 10 years and that is why everyone has to start this now. Each individual needs to have a long-term plan and clear and defined rules in place. If the set amount of 10% of your earning capacity is just enough to met this plan and you have a long term plan of achieving a 11-15% compounding return there is nothing wrong with taking any gains in your speculative trades and spending it on yourself. If for example you do get a stock that rises 500% then spending the proceeds shouldn't be a concern, you can reward yourself from smart investing in stocks that you have been able to see future value and growth in them. But keep in mind the stocks and asset allocation within your secure/growth areas 60-70% will not be touched for the timeframe of the plan.

Lets have a look at a stock that pays a yield of 6% and the compounding return is 5%, in total 11% compounding return. This person is able to invest \$12,000 per year as part of their plan and decides only to buy banking stocks. Each year this person buys the 3<sup>rd</sup> week of September regardless to achieve the extra 5%, and I'm being conservative with this return because the average return in the market for the past 50 years has been closer to 12% than 5 %.

- By the 12<sup>th</sup> year the dividends returned will actually match your own contributions. So for every \$12,000 invested you will be returned over \$12,000 in dividends alone, so in the 13<sup>th</sup> year our buying power increases to over \$24,000.
- After the 13<sup>th</sup> year you have contributed \$156,000 in total but your compounding return of 11% is now over \$348,700, more than double.

Keep in mind that the early part of the plan the growth of the return is slow, it is only when we move into the latter years that the returns are explosive.

- By the 20<sup>th</sup> year we have invested \$240,000 but at the same rate of return our account is now \$854,295.29
- By the 30<sup>th</sup> year our investment of \$12,000 per year, which by then will seem like a lot less has now contributed \$360,000 but our return of 11% compound is now \$2,648,440.70
- If we wanted to cease contributing at this point our dividends alone from our investments would be over \$158,000 per year. Not a bad pension in my opinion to live out our retirement.
- By the end of the 35<sup>th</sup> year we now have over \$4,545,700. In the space of 5 years our account has nearly grown by an extra 2 million dollars.
- By the 40<sup>th</sup> year you would have nearly \$7.8 million dollars. In the space of 10 years you have added another 5 million dollars. Our retirement now is set at a yield of 6% returning approximately \$468,000 per annum for the rest of our lives.

With life expectancy now pushing beyond the 90's and eventually move beyond 100 years of age, knowing that for the rest of our lives we could earn approximately \$468,000 per year makes the next 30 or more years a lot more enjoyable. And keep in mind I have only set the growth of our allocation to 5% above the yield something that can easily be surpassed over the length of our plan.

Let us revisit one of my favourite sectors, the banking sector and the Commonwealth Bank. The banking sector provides everything in historical terms; the yield and growth I want for my long-term financial plan based on compounding.

Think back over 10 years when CBA was \$5.00, now imagine you bought and held the stock until this day. You would be pretty chuffed now with the stock trading over \$37.00 and a dividend yield of 5.5%. Now imagine you bought CBA every year since and held, imagine the compounding effect this strategy would have until you retire.

Had you bought CBA in the float, the dividend income today represents a yearly gain of 39.4% on invested capital. That is assuming no reinvestments and no compounding. A trader would be happy with a 39.4% return and I'd be hard pressed to find a fund manager coming close to that. Here you have done zero work and have almost zero risk. The price of CBA contains over \$15 worth of dividends, so you're well ahead if the price of CBA even halves.

The importance of investing in 'value' companies is, understanding the sector and especially the historical yield of the stock and the long-term total shareholder return. We also want to be investing in stocks that historically return 100% franking dividends. I mentioned previously that we do not sell stocks within this long-term strategy, however investors need to seriously consider cutting stocks from their portfolio once a stock stops delivering dividends. We are not concerned with price action of stocks as long as the stocks keeps delivering the yield we want. We want to protect our income stream along with our capital and invest into stocks that meet our criteria.

When we look at a basket of stocks, say the top 20 in the market we will see that historically the yield return is approx 5%, anything above 5% is a bonus in my opinion and along with the historical growth of the stock we should be on the path of creating some serious wealth in latter years.

The sad fact is, most short-term traders will not be able to make more money from their trading exploits than if they were working for someone else. Even large funds make most of their profits from management fees than from trading profits. If professional institutions are finding it hard to make a dollar from trading then what hope do most traders have? Only exceptional traders will be able to achieve a greater return above the average growth of the market of 10-12% regardless how often they trade. If you are not one of those exceptional traders and not achieving the growth of your account above the historical growth of the market then it is imperative that long-term investing becomes a high priority.

The major problem most traders face is that they are under capitalised to make a living out of trading, unless they have a windfall in their capital from somewhere, or they're employed to their full capacity. For a given income level, you can only save up x% of your income to be accumulated as trading capital. Trading full time is a lifestyle choice and for most it's not exactly a financial one. And that's the reality!

Throughout this chapter I have described how we are to develop a long-term financial plan using the compounding strategy, but now I want to jump the gun and get this plan juiced up. Firstly our goal is to provide an income stream when we retire by the way of company dividends. This goes back to the beginning of the book and the 'numbers game'; we need to work out how much money we need to live. The question then becomes, how large a capital base do we require to provide a living based on compounding returns for my future? What size asset base do we consider is necessary to generate a six-figure income from dividends?

We have an understanding that using the historical growth average of the market and investing approximately \$10,000 per year and re-investing the dividends it will take approximately 25 years before we see a six-figure return from dividends.

*"If we want to jump the gun and have a dividend/income stream that meets our living expenses sooner rather than later or actually want to retire and live of this income now, we would then need to work out how much asset base we require too fulfil these requirements..."*

*"It's quite easy to work it out. Look at the dividend yield, and work backwards. At the moment, the index yields around 4%. Some stocks can yield around 5-8%. You can use this formula to gross up the dividend yield:*

*Gross Yield = Yield / (1 - 30% \* Franking%)*

*note: 30% is the company tax rate, expressed in decimal, i.e. 0.3. Franking is also expressed in decimal, for 100% franked, use 1.*

*e.g. Price = \$30, dividends in the past 12mths: 70c and 80c, fully franked.*

$$\text{Yield} = (.70 + .80) / 30 = 5\%$$

$$\text{Gross Yield} = 0.05 / (1 - .30 * 1) = 0.714 \text{ or } 7.14\%$$

*Now if you want to earn \$100K in dividends, you will need:*

$$100K / 7.14\% = 1,400K \text{ or } 1.4M$$

*or if you base it on div cash flow:*

$$100K / 5\% = 2,000K \text{ or } 2M$$

*One simple way to account for retirement lifestyle is to work out how much you current lifestyle costs you. For example, you spend \$50K to live today. At 5% yield, you would need \$1M to support your current lifestyle, if you were to just live off dividends.*

*What you do now is aim to have \$1M (in today's dollar) as your portfolio. If you don't have it, then BORROW it! BORROW anyway you can so you can have a \$1M portfolio. Overtime, this \$1M will grow. The yield will also grow with it, and will be enough to support your "current" lifestyle even 200 years from now, inflation adjusted! In the meantime, the amount you borrowed at the moment will remain \$x, if you haven't paid off a cent towards it. In 20 years time or even to the extreme, 200 years time, \$x will be a meaningless amount of money.*

*The trick is to borrow as much as you can service the loan. The dividend would obviously help you servicing it. In addition, your current income can be used towards it. Just aim to have a \$1M portfolio (for a \$50K pa lifestyle). The \$1M is the most important figure.*

*For example, fixed income securities are yielding between 5.5% and 5.8% depending on maturity and credit rating. Direct property would give you a yield of around 3-6% depending on the locality of the property. I use 5% yield as a "benchmark" and planning purposes. Anything above it is a bonus, and I would not rely on it. When you diversify enough, eg top 20 stocks + fixed income/cash, the yield would be around 5%.*

*The \$1M is the size of your portfolio, not necessarily the amount you have to borrow. Although, the worst-case scenario is you have to borrow the whole amount. So, let's look at the worst-case scenario. You borrow \$1M, and as you mentioned, you're ahead if the capital growth is at least 1%. The average growth of the index is around 10-12%pa.*

*Remember there are 2 components of growth in this thing, capital growth, and yield/dividends. The capital growth will be compounded. The dividends will follow the growth of the capital base.*



*The idea is to jump in to this compounding machine as early as possible, with as much money as possible. There will be a point where 5% of the portfolio will be larger than 7% of \$1M. From that point on, the portfolio will be self-funding. This point will be equal to:*

$$7\% \ 5\% \times \$1M = \$1.4M$$

*When your portfolio reaches \$1.4M, provided the yield remains at 5% it will be self-funded.*

*Alternatively, if you only borrow:*

*5% 7% x \$1M = 0.71M today, i.e. use \$290K of your own money to make up the \$1M, the portfolio is also self-funded from day 1.*

*Back to borrowing the \$1 million, at 10%pa compounded, it would take about 3.5 years to grow to \$1.4M. You only need to service the loan (i.e. top up) for the first 4 years.*

*The risks??*

*Well, it's possible that your portfolio doesn't perform as well as expected. You have a downside risk. The idea is to start this strategy when you still have a high earning capacity, or growing earning capacity to give yourself latitude before the compounding effect starts to take care of itself. The downside risk can also be handled easier when you still have a high earning capacity. If you suffer a setback early in the plan, it won't delay your retirement plan too much. The risk for NOT implementing this strategy is that your retirement income won't be guaranteed, or inflation adjusted. If you leave it to close to retirement age, any setback in the portfolio would be too significant to your financial wellbeing. Also, the closer to retirement you are, the less risk you can afford to take. The lower the risk the lower the reward.*

*Another important thing to look at is the dividend growth. This is probably more important than the capital growth. The dividends are your cash flow." (Thomas Angus)*

I have included Thomas's thoughts because he agrees with the exact same principle of compounding, even though it is slightly different to what I suggest, the theory manifests in the same way and has the same outcome. Some might want to implement what Thomas suggests and his thoughts behind the leveraging of this strategy. Again, it is the leverage of the positions that makes a world of difference no matter what we are trading; short, medium, or in this case a very long time.

***If you are serious about your future and you family's future, the principles of compounding must be applied now. Compounding gives us the knowledge and the plan that we are on the path to financial wealth.***

# Analytical Market Trading 2006

We have just had a major shift in all timeframe cycles with the close of the trading year.

The Primary, Secondary, Intermediate, and short-term cycles have all ended and dynamically shifted for 2006.

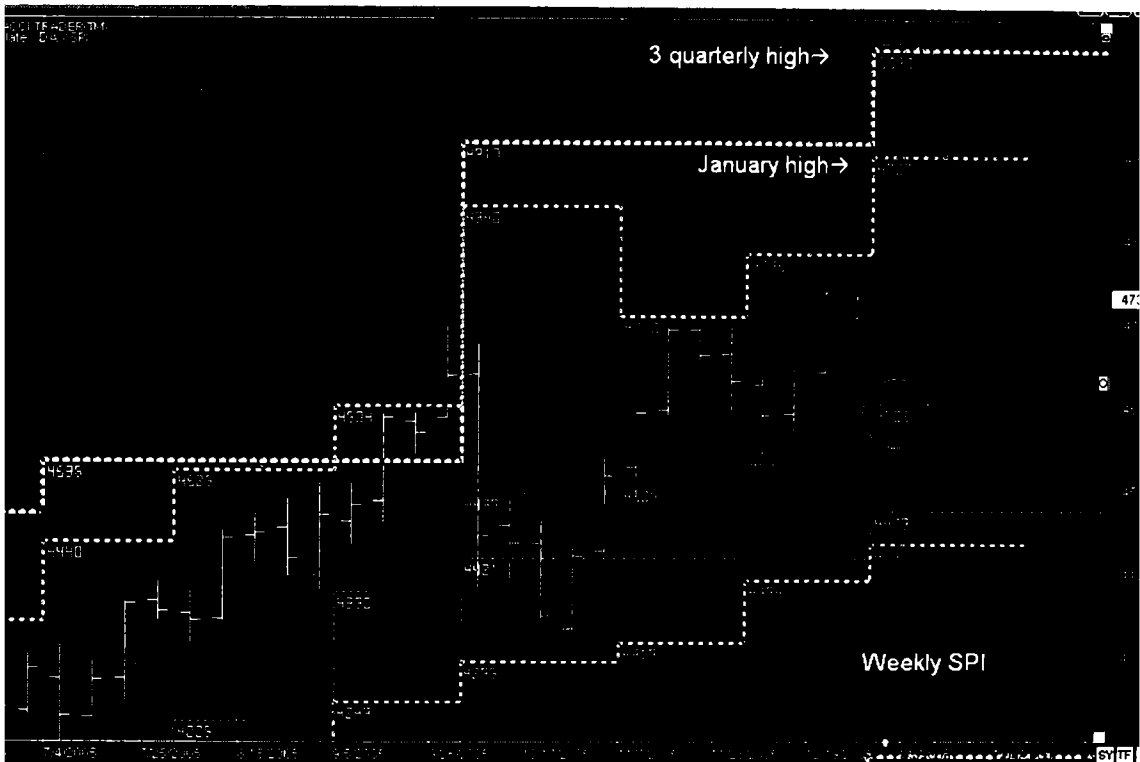


Figure 148

We can see in the weekly chart of the SPI (and all other markets) the shift in the Monthly and Quarterly dynamic timeframes higher. These dynamic levels will clearly define the market path for the market in the New Year 2006 along with defining Market Risk.

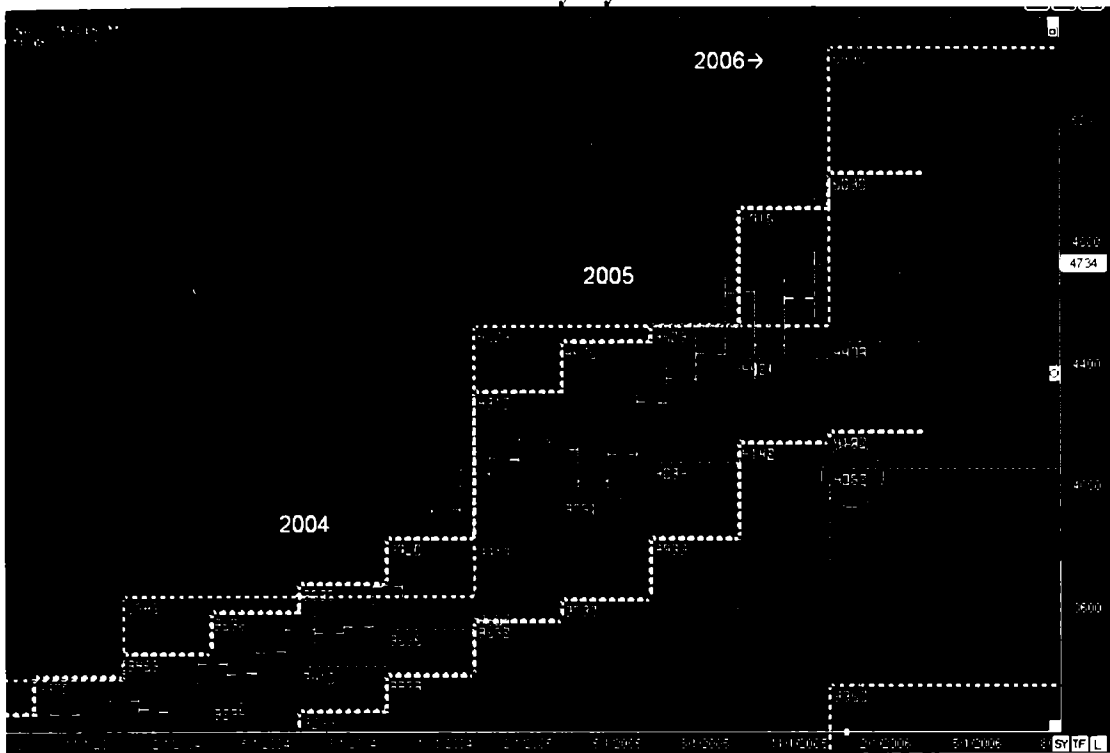
Because as the market shifts dynamically higher, so does our 50% levels that clearly define the strength of the trend. In January 2006 it is 4605.

Since the market crossed over 4490 in November, the 3-month 50% level has defined the strength of the trend whilst the extreme of the range gave us a probably path for the market to move towards within the timeframe.

Once the weekly closed above 4490 it confirmed our 100% entry into leverage positions because of the expectation of the Christmas Rally towards the December 2005 extremes.

Once it reached the December extreme traders can make the decision to exit 50% leverage positions. Others might want to use the change of the 3-day cycle to exit their 50% holdings, or Traders can have the same expectation as in 2005, hold for the 3-Quarterly extreme in 2006 whilst using 'Trailing' stops.

## Primary Cycle



**Figure 149.**

Figure 149 shows the monthly chart of the SPI and the Primary Dynamic range. We have our ultimate target for 2006 (5445).

You will also notice that the monthly timeframe has once again closed above the Primary range high, this confirms a breakout in the Primary cycle. Remember whenever there is a close above the extreme of the range we have an expectation that price 'could' move towards the next extreme within the same timeframe. So in 2006 we need to keep in mind that 5445 is still a possibility. This is the reason why traders should exit 50% leverage positions only. You don't want to miss the market moving another 700 points higher in 2006.

### Trailing stop

Using the same patterns in the market and the AMT model we have the expectation of the market moving higher, so traders would need to use the exact same patterns in the market when defining our 'Trailing Stops'. These trailing stops are based on the 3-month 50% levels and the weekly close, for the month of January we need a weekly close below 4605 and the 3-month 50% level to exit all leverage positions.

The following month this 50% level will once again shift dynamically, so our trailing stop will shift also, whilst we are trading a dynamic market that keeps on moving higher based on the multiple higher timeframes.

Traders would exit and remain on the sidelines until the variables line up once again.

This is important because you will also notice that the 3-Quarterly 50% level is 4478, this is the exact same level as the 50% of the single Primary cycle.

Price needs to remain above this Primary 50% level in 2006. Any test of this level and we would need to see the market move back above the 3-month 50% level once again. If it does, then traders would want to move back into leverage positions once again, preferably 100%.

If the market keeps on rising in early 2006, then traders would seriously think about exiting all their leverage positions at the 3-Quarterly highs @5030. This is the exact high as in March 2005 based on market dynamics. Once 100% cash traders will remain on the sidelines until the AMT variables line up once again.

Because this is based on the Index, traders should focus on trading the stocks that have the largest weighting within the market they are trading. Normally there's only a hand full of stocks that have a large weighting within each index, so that's the focus when trading leverage positions.

### **Market Risk within the Primary**

You will notice that we have had a 3-year rally on the markets. By following the AMT model we have clearly defined the Market Cycles, Market Path, Structure and Market Risk.

This is important, because we also have to acknowledge that the market will retrace back towards the 3-year 50% level. It might not happen in 2006, but it will happen and we should all be ready for it to happen.

In figure 149 we can see that the 50% level is 4062, more than 700 points below where the market closed in 2005. That is why we need to acknowledge and define the strength of the trends based on the 50% levels. If we are 100% cash and trading below the 3-period monthly 50% levels then we wait until the variables are aligned to re-enter.

If it doesn't cross and close on the weekly timeframe then we wait.

If and when it reaches the 50% level of the 3-year range then we enter 50% leverage positions, and then wait until the market crosses back over the 3-month 50% levels once again to confirm our 100% entry.

It can't be simpler than that.

All Traders will always be subjected to the market. We have our long-term compounding in place with the timing model of September/October to build wealth. **(Note: over 100 years on the Dow the statistical date for the market to rise has been October 27<sup>th</sup>)**

We have our medium term cycle trading using leverage to with clear trading strategies using 3-period cycles and dynamics.

And lastly we are trading 100% mechanical AMT systems for derivatives on a daily basis.

Traders who have followed the AMT model over the years knows how accurate and precise it has been, and I'll take a calculated guess that it will be accurate and precise in the future.

The AMT model and methodology has been the most accurate analysis there is on markets around without doubt.

### **In Conclusion.**

Of all the chapters within this book Chapter 11 is the most important. Nothing is guaranteed when it comes to trading and after 40 years of trading you might not have a dime left in your pocket. In fact after a few years of trading the same could be said.

Investing on the other hand with a clear and defined goal and strategy based on the principles of compounding will give you wealth beyond what you could ever imagine.

You don't have to be a trader to become a success in the market. All you have to do is understand the cycles of Timing, understand the value of the companies you are investing in, and more importantly understand that by adhering to the plan you have set out with your asset allocation you are on the right path to creating some serious wealth and enjoying it.

### **My Personal Thoughts:**

Traders need to develop mechanical systems that have been back-tested and provide a 'positive expectancy' that each trade 'can' succeed, and that system incorporates the axiom of 'letting our profits run whilst cutting our losses quickly.' Each trader needs to fully understand this to guarantee success when trading short-term derivatives

Traders now have a 'visual' of how well the trend is cycling by the use of the 3 period cycle and when the odds of the trend stalling and/or reversing at each dynamic timeframe extreme based on the higher timeframes.

However, these systems will be different depending on each individual trader but the dynamic levels are not. These levels are clearly defined and often provide traders with the variables of taking trades discretionally. Traders also need to understand that each trade still operates under the random distribution of wins and losses. We still don't know whether the trade will work or how much we will make, the only thing we do know is our dollar risk because our stop loss will be clearly defined. And traders need to understand that they have to subject themselves to the market continuously if they decided to introduce a discretionary method to enhance their already mechanical system that returns a positive expectancy.

## Systems:

Trading is about identifying statistical patterns in the market, applying math and then seeing what is the expectancy these patterns will provide, and what dollar reward these systems will provide. With the market being non-linear, breakout systems have a tendency of a higher failure rate and less of a dollar reward for intra-day derivatives trading.

To increase our dollar expectancy, traders need to develop systems that work with non-linear markets. As I say, it is the rotation of the market within itself as it dynamically moves forward that we need to trade, basically we need to develop systems that trade against all trends. Systems need to be regressive in nature with precise entry and exit points based on statistical patterns.

Any system needs to be precise in nature, because each system has a path to run, we know what our dollar reward will be, and this is crucial in maximising our dollar expectancy and reward whenever we trade. If we know where the market is going based on 'system triggers' then we increase our expectancy rate. That is why I highly recommend traders develop systems using Range bars.

I've introduced many to the methodology of Market Dynamics of higher timeframes, 3- period Cycles, Range bars, Standard deviation trading, Market Risk, and many other techniques that most were not familiar with. The reason for the many techniques are because each has an expectant 'observed' statistical pattern that accompanies each variable. There is a statistical edge, and that is important on all 3-type trading.

And In my opinion, traders should be trading markets that have a constant spread of 1:1.

Markets: the SPI (Australia), DOW minis, GBL, Russell, Estx50 and many others that are Liquid, volatile, and have a constant spread of 1:1.

The ES minis don't meet the criteria.

Someone recently asked me why the DOW minis and not the ES, and my reply was; the spread of the contract is a major factor when trading. The wider the spread the worse it will be for any trader because it limits our money management.

Trading the ES places you at a disadvantage because of the spread, and in fact, it could put you as much or as far as 60%, because of the increments between the two when you compare the Dow minis and ES.

The Dow minis moves in 1 point increments, whereas the ES moves 1 point in 4 point increments, so when you are trading the DOW you have 6 more places to place your stop or profit objective compared to the ES.

This is very important for any discipline traders using discipline stops or even profit objectives using the Range bar systems.

- 1 point in the E-mini S&P = about 10 points in the Dow minis
- 1 point in the E-mini S&P = \$50; 10 points in the CBOT mini-sized Dow = \$50

So the values of the two are pretty much the same, and when you look at the movements of the ranges, again they are very similar over the course of the trading day.

When you factor in the spread you can see what a disadvantage is when trading the ES.

By trading the Dow minis, the trader is essentially cutting the spread by 60 percent. In addition, due to the spread, you will get your stops picked off more in trading the ES minis on stops that are placed equivalently on YM.

Trading the DOW minis will save you a buck load over your trading career because we have 6 more places to trade within the same value area compared to the ES.

## Systems Development

The theory running through the book is based on multiple dynamic higher timeframes, or the Primary, secondary, intermediate and the short-term.

When developing systems, traders should focus on developing 4 different systems that meet the same criteria. Trading the market with 4 different systems over 4 different lengths so we maximise the potential of the market whilst minimising the Risk.

- \*The first system should be based on the largest length or the Primary Length.
- \*The 2nd system should be based on the Secondary Length.
- \*The 3rd system is the normally the 'Optimum' Length, or the systems that traders focus on.
- \*The 4th system is the short-term system or filter system.

As I say... *"The only proven method of trading is systematic trading using dollar expectancy. If one set-up has a high probable outcome then success can be assured if the trader follows it. Whether the trade works or not, we simply move on to the next"*

*"Trading a full-automated system will dramatically increase your chances to succeed in trading, because it eliminates the reasons why 90% of all traders fail."*

The theme also running through the book is trying to make you into a 3-type trader; the short-term derivative trader, the medium term cycle trader, and the long-term position trader.

The job of any systems you develop should be based on this same concept, once again making you into the '3-type trader'. The reason we trade the three definitions goes back to my article 'the numbers game'

*"In a nutshell most traders fail to understand the 'numbers game' or what they are seeking from trading in monetary terms. The rules and goals we set."*

*"The reason why we trade is the dollar return we desire. By that I mean, if you want to be a full time trader you need to work out your own cost of living and everything else, and then make sure that the system is able to cover this".*

Traders' need too focus on their ultimate monetary daily goal and then structure the remaining two-type trader definitions with strict monetary management techniques using their larger systems.

There are three types of traders when trading the markets, as there are with all market participants based on my book; the day trader, the swing trader and the position trader. All traders no matter

the type should be trading using systems, precise trading rules, entries and profit objectives that are customised for each market.

All four systems need to have approximately the same variables within; the only difference will be the length of the Range. All four systems need to have approximately the same positive expectancy.

The reason is, traders would focus on exiting positions using the 3 higher Range bars, if we know how long each Bar is, all we have to do is place exit strategies 1 tick before the bar completion.

The first bar exit hopefully meets our daily monetary goal, after that everything else is a bonus, using break-even stops from entry.

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I hope this book has been worthwhile and you are able to incorporate a new dimension to your trading, because I honestly believe that what is within these pages each and every one of us should be able to increase their edge and their odds of success, and hopefully lead a successful trading career.

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### **And Lastly,**

When I first decided to write the book **Analytical Market Trading, 'a window into the future'** and start the coaching service in early 2003 the cynicism that followed by some members of the forums I visit was typical. The loudest and more vocal always seem to be the same ones trying to search for workable systems and answers. They continue to fail in developing workable systems but nevertheless they'll tell you in no uncertain terms what works and what don't. You are only bounded by your own experience, however your experience can be as much of a hindrance as it can be valuable. Or, if they can't comprehend it, they dismiss it as bogus!

Why did I write this book in the first place? I wrote this book because I was proud of what I had developed, the time I spent with it, trading it, and I wanted to share it with others. I personally believe that I have something worthwhile to share and a story to tell based on my methodology. Don't be stupid enough and fail too investigate the contents of this book in market conditions, because I have come across some who find it daunting only to throw it on top of the pile of other trading books they have accumulated then come back years later wanting help.

The majority fall short of capturing the true potential of the markets because of their own beliefs that are anchored around their necks.

The AMT model, methodology, and AMT mechanical systems is my experience and belief how traders can potentially make more money in derivative and equity markets using different strategies; short-term derivatives, medium term time-cycles, and long term investing using the compounding strategy.



## ***A word of thanks!***

**I would dearly love to thank the many people that have helped me evolve into a better trader over the many years I have been involved with the financial markets. I started with dedicating this book to the many pioneers of the industry and their visions, beliefs and damn hard work in helping all of us.**

**I must firstly acknowledge the wisdom and teachings of the late Robert Krausz. Jack D. Schwager featured Robert Krausz in 'the new Market Wizards' and his vision and market experience help develop the Fibonacci-Trader software and the many unique features within the program that are shown in this book.**

**My gratitude goes to McClellan and his timing models. I want to thank McClellan himself for pioneering his proprietary timing service. I could just imagine the many hours he has spent in bringing his model to fruition. Thanks to Vicente M Nicolellis for developing the Range bars, without these I would be a poorer man.**

**And lastly to the team at Fibonacci Trader for continuing the legacy of the Late Robert Krausz!**

**By FRANK DILERNIA.**

**Note: Please log into the [www.datafeeds.com.au](http://www.datafeeds.com.au) for continued updates and analysis of current market action and my short, medium, and long-term forecasts based on the information that is within this book.**

**I have also just released fully automated 100% mechanical systems for trading Global Derivative Markets based on the contents & systems within this book. For more information please email... [frankd@fdtradeco.name](mailto:frankd@fdtradeco.name)**

**All the Information within this book is owned and copyrighted by Frank Dilernia. No part of this book can be reproduced without the consent of the author.**



Frank Dileria is the author of Analytical Market Trading 'a window into the future' and also the developer of a Statistical Time and Price Model that clearly defines Market Dynamics, Market cycles and most importantly Market Risk based on the statistical correlation of Price over TIME.

This book will simplify the theories of Fibonacci, Market Profile, Gann, Geometry and Elliot Waves to become the one and only methodology to be truly governed by Time. His work is one of the most advanced trading books for today's market because of his work with Statistical Range of Price and Statistical Advance Timing techniques.

The AMT model has gained respect from most market traders and analyst's around the globe because of the clear and precise nature of incorporating Math, Time & Price to truly give order to chaos, and not curved-fitted to suit the author and developer after the event.

Leading Analyst's from global trading houses are now taking a keen interest in the AMT model, and with word of mouth the AMT model will surely be the prime Analytical Tool most traders and investors will use for all their trading decisions whether you are short-term derivatives traders, a medium-term cycle trader, or a long term investor.

With the AMT model and the information within this book there is no reason why you shouldn't be all three. And Frank will show you how to do it.

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*I wanted to say that I've read and own quite a collection of books on trading and your's is probably the most groundbreaking or revolutionary book I've read. Bill (US)*

*What do I think thus far: well I would go as far as saying without any reservation it is the best trading book I have read since my foray into trading began in 1997. I would happily bin every book I own and keep just your book. Nigel (Aust)*

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